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AUTHOR Crooks, Lois A.; Mahoney, Margaret H.
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ABSTRACT

This report is a description of the instrumentation, methodology, and sample obtained for the final phase of the study concerned with the Occupational Inventory Management Specialist. Inventory managers were asked to keep a Daily Activity Log for five days and to record the range of activities and interaction with others in the process of accomplishing their work. Preliminary information gathered was summarized as a basis for decisions as to the selection of the aptitude tests, the construction of the biographical data questionnaire and task list, and the development of the criterion measures. Approximately 200 Blacks, 100 Mexican-Americans, and 300 Caucasians were tested, primarily at grade levels 9 and 11, the journeyman levels in inventory management after progress through the GS-5 and 7 training periods. The total testing time involved in the various measures to Inventory Management Specialists was approximately one and one-half days. The aptitude tests and Personal History Questionnaire took up the first day, and the work sample was administered on a half-day following. The results of the analyses of the data obtained for Inventory Management Specialists will be contained in a comprehensive report of the project. (Author/CK)

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PREDICTION OF JOB PERFORMANCE FOR BLACK, MEXICAN-AMERICAN,
AND CAUCASIAN INVENTORY MANAGEMENT SPECIALISTS

INSTRUMENTATION DEVELOPMENT AND DESCRIPTION OF SAMPLE

Lois A. Crooks and Margaret H. Mahoney



December 1971

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From U. S. Civil Service Commission

William A. Gorham, Program Director

From Educational Testing Service

Joel T. Campbell, Senior Research Psychologist, Principal Investigator

Donald A. Rock, Senior Research Psychologist

Lewis W. Pike, Research Psychologist

Lois A. Crooks, Associate Research Psychologist

Charles F. Barr, Executive Assistant to Mr. Messick

Margaret H. Mahoney, Senior Research Assistant

Mary Ellen Parry, Senior Research Assistant

Harriet Blizzard, Research Assistant

Virginia Rau, Administrative Assistant

¹Prior to September, 1971, Dr. Maslow was Chief, Personnel Measurement
Research and Development Center, U. S. Civil Service Commission.

I. Introduction

A study of test and job performance of various subgroups within specified occupations in the Federal Government was begun in late 1966, to be conducted jointly by Educational Testing Service and the U. S. Civil Service Commission. The project, supported by the Ford Foundation, is concerned with the relationship of selected background and ability measures to a number of criteria of job performance for several ethnic groups.

The pilot phase of the project was a study of the occupation of Medical Technician (GS-645), in Veterans' Administration hospitals. For description of the methodology and results in this phase, see Pike (1969); Flaughner, Campbell, and Pike (1969); Campbell, Pike, and Flaughner (1969); Campbell, Pike, Flaughner, and Mahoney (1970); Rock, Campbell, and Evans (1970); and Parry and Mahoney (1970).

The feasibility of gathering data on ethnic subgroups within occupations was demonstrated in this initial phase, and study of two additional occupations was funded: Cartographic Technician (GS-1371) in the U. S. Army Topographic Command and the Coast and Geodetic Survey, and Inventory Management Specialist (GS-2010) in four agencies of the Department of Defense. These occupations were chosen primarily because it would be possible to obtain data for a subgroup of Mexican-Americans as well as for Blacks and Caucasians. Other considerations were the differences in skills and abilities involved and the range in job levels across all three studies, providing a broad base from which to compare and to generalize findings. The job of Inventory Management Specialist is at the highest GS-level to be studied.

A description of the instrumentation, methodology, and sample obtained in the Cartographic Technician phase can be found in Parry (1971). The present report is a description of the instrumentation, methodology, and sample

obtained for the final phase of the study concerned with the occupation of Inventory Management Specialist.

II. Preliminary Study of the Inventory Management Specialist Occupation

To gain understanding of the work performed in the occupation of Inventory Management Specialist and the necessary preparation, skills, and abilities needed to perform the work, members of the research staff visited installations of four agencies of the Department of Defense at various locations. Contacts with the installations were made through Washington headquarters. Arrangements were made to introduce the project to senior management levels as well as to meet with those concerned with the direction of the inventory management function. More than 150 separate interviews were conducted with Inventory Management Specialists and their immediate supervisors. Representatives of other departments in frequent interaction with the Inventory Management Specialists, such as Directorates of Procurement and Technical Operations, were also interviewed. Organization charts, samples of forms used, and copies of written procedures were obtained. During interviews, IMS practitioners were asked to describe their previous experience, the route by which they entered the IMS classification, kinds of on- and off-the-job training they had received, what they saw as the necessary qualifications and personal characteristics needed for the job, and the routines followed in their daily work.

A number of the inventory managers interviewed were asked to keep a Daily Activity Log for five days and to record the range of activities and interaction

with others in the process of accomplishing their work. These Logs were to be mailed to the research staff directly. A copy of the instructions and sample log is included as Appendix A.

Preliminary information gathered was summarized as a basis for decisions as to the selection of the aptitude tests, the construction of the biographical data questionnaire and task list, and the development of the criterion measures. Appendix B outlines (1) the knowledges and abilities described as needed for the IMS job in the Civil Service Position Classification Standards; (2) the basic abilities, personal qualities and characteristics, and the managerial skills (administrative and interpersonal) needed for the job as summarized from interviews; (3) the areas of possible variation among and between jobs; (4) general activities perceived as common across jobs and agencies and common problem areas, and (5) areas where differences were perceived across jobs or agencies.

III. Selection of the Sample for Study

Plans were made to test approximately 200 Blacks, 100 Mexican-Americans, and 300 Caucasians, at the following locations:

Army Tank-Automotive Command, Detroit

Defense Electronic Supply Center, Dayton

Defense Industrial Supply Center, Philadelphia

Navy Aviation Supply Office, Philadelphia

San Antonio Air Materiel Area, San Antonio (Air Force)

Table 1 shows the composition of the sample obtained. It will be seen that the sample is smaller than planned. When the testing began, much greater resistance to participation was encountered than in the previous phases, where the number refusing to participate was a very small percentage of those asked.

Suggested reasons for the high rate of refusals appeared to include (a) Black and Mexican-American suspicion of testing, (b) Caucasian resentment of projects which appear to favor minorities, (c) the fact that Inventory Managers on the whole were older and in higher grade levels than the Medical Technicians and Cartographic Technicians, and (d) the general tenor of the times (resistance to any suggestion of invasion of privacy, regimentation, or imposition of authority).

Table 1
Description of the Sample by Ethnic Group
and Total

	Black	Mexican- American	Caucasian	Total
Army Tank-Automotive Command, Detroit	42	--	49	91
Defense Electronic Supply Center, Dayton	36	--	44	80
Defense Industrial Supply Center, Philadelphia	14	--	31	45
Navy Aviation Supply Office, Philadelphia	6	--	15	21
San Antonio Air Materiel Area, San Antonio (Air Force)	18	75	75	168
Total	116	75	214	405

A decision was made to test primarily at grade levels 9 and 11, the journeyman levels in inventory management after progress through the GS-5 and 7 training periods. (Entry into the 2010 classification is at grade 5, with progress to grade 7 and then to grade 9 within a prescribed period, subject to satisfactory performance.) A number of inventory managers in GS-7 were included in order to increase the ethnic samples.

Table 2 shows the numbers tested in each ethnic group at each grade level, and totals.

Table 2
Distribution of Inventory Management Specialists Tested,
by Grade Level and Ethnic Group

Grade Level	Black	Mexican-American	Caucasian	Total
GS-7	7	14	8	29
GS-9	76	50	136	262
GS-11	24	6	41	71
Other (or missing data)	7	4	20	31
Total	114	74	205	393

The grade level data in Table 2 are taken from the Personal History Questionnaire, not completed by a small number of subjects, which explains the differences in the Ns in the two tables.

IV. Selection and Development of the Measuring Instruments

A. The Predictor Battery

1. Aptitude Tests

A battery of 12 aptitude tests was selected to measure abilities derived from systematic study of jobs and found to be relevant to the job of Inventory Management Specialist. The same general method was used in selecting these

tests as was used for the Medical Technician and the Cartographic Technician batteries. One important basis for selection was time required to take the tests. Since a rather large battery of tests was needed to measure a variety of abilities, all but one of the tests chosen had short time limits. Ease of group administration and face validity were also felt to be important. Availability of tests with two separately timed halves, facilitating reliability estimation, and the need for speeded versus unspeeded tests were other considerations.

Ten of the tests chosen were from the French, et al., Kit of Reference Tests for Cognitive Factors. These tests have short time limits, are divided into separately timed halves, have known factorial content, and can be group-administered easily. Since these tests were designed for research purposes, the subjects used in this study probably would not have taken them previously. Two U. S. Civil Service Commission tests were also used: Test No. 135 - Following Oral Directions, and Test No. 170 - the written test portion of the Federal Service Entrance Examination (FSEE). These were selected because they have been shown to measure aptitudes thought important to the job being studied. Both are easily group-administered. Although Test No. 170 is lengthy, requiring 160 minutes' administration time, there were several cogent reasons for including it in the battery. The FSEE was designed by the U. S. Civil Service Commission in 1955 and has been used in selected government occupations as the primary testing device for evaluating applicants who meet certain educational and experience qualifications for selection into career development training programs involving progression from entry level positions (GS-5 or GS-7) to journeymen positions (GS-9 to GS-12). Many of the Inventory Management Specialists had participated in the career development training program and had taken some form of the FSEE at least once before. (Subjects were asked on

the background questionnaire whether they had ever taken the FSEE. Forty-one percent of the Black sample, 20% of the Mexican-American sample, and 51% of the Caucasian sample said they had taken the FSEE, or 42% of the total group replying to this question.) This study presented an opportunity to obtain concurrent validity data.

The total time required to administer the battery, including giving instructions, was about five and one-half hours. The Personal History Questionnaire was administered along with the aptitude battery, making the testing time about six and one-quarter hours. The tests with the factors they represent are listed below in the order in which they were presented:

	<u>Factor and Test</u>	<u>Testing Time</u>
	1) Factor P: Perceptual Speed	7 minutes
*M	Number Comparison Test (P-2)	
	2) Factor Cf: Flexibility of Closure	24 minutes
M,C	Hidden Figures Test (Cf-1)	
	3) Factor V: Verbal Comprehension	12 minutes
C	Vocabulary (V-2)	
	4) Factor Ma: Associative (Rote) Memory	14 minutes
C	Object-Number Test (Ma-2)	
	5) Factor I: Induction	18 minutes
	Letter Sets Test (I-1)	
	6) Factor Rs: Syllogistic Reasoning	20 minutes
	Nonsense Syllogisms Test (Rs-1), (Unspeeded - 8 minutes each part instead of 4 minutes)	
	7) Factor N: Number Facility	8 minutes
M	Subtraction and Multiplication Test (N-3)	

	<u>Factor and Test</u>	<u>Testing Time</u>
	8) Factor V: Verbal Comprehension	20 minutes
M,C	Extended Range Vocabulary (V-3) (Unspeeded - 8 minutes each part instead of 6 minutes)	
	9) Factor R: General Reasoning	14 minutes
M,C	Necessary Arithmetic Operations Test (R-4)	
C	10) USCSC Test No. 135, Following Oral Directions	17 minutes
	11) Factor Rs: Syllogistic Reasoning Inference Test (Rs-3)	16 minutes
	12) USCSC Test No. 170, (Portions of the Federal Service Entrance Examination)	160 minutes
	Part A: Verbal Abilities	
	Part B: Abstract Reasoning	
	Part C: Quantitative Reasoning	

* M = included also in Medical Technician battery

C = included also in Cartographic Technician battery

Description of the Aptitude Tests

A brief account of each of the tests follows, with an explanation of what each was intended to measure. They are in the order administered, except where grouped for definition.

The Number Comparison Test was selected to measure speed of visual perception in comparing sets of numbers and identifying differences. Inventory Management Specialists must refer constantly to lists of numbers, and speed and accuracy are important abilities.

A major responsibility of the Inventory Management Specialist is to review trends and patterns of demand for their items and to decide whether or not to change the requirement forecasts. The Hidden Figures Test was chosen

to measure the ability to identify configurations in spite of perceptual distractions, suggested as a measure of analytical functioning. This test was also a part of the batteries administered in both of the other occupations studied, thus making comparisons possible across the three samples.

To determine whether speededness makes a difference in the predictive value of a test or if there is a difference in performance among ethnic groups on two tests measuring the same factor, one speeded and one unspeeded, two pairs of tests were selected. One pair of such tests measured the Verbal Comprehension factor. The Vocabulary Test was given as a speeded test, and the Extended Range Vocabulary Test was essentially unspeeded by extending the time limit. Both tests measure the ability to understand the English language. This factor was felt to be very important for Inventory Management Specialists, since they are constantly issuing both oral and written orders and must be able to follow both oral and written instructions, often of considerable complexity.

According to one practitioner, a good Inventory Management Specialist needs "a memory like a bull elephant." In addition to volumes of written specifications, which are constantly being revised, every day he receives information on the items he manages in the forms of lists of numbers, requests for disposition, descriptions of new items, changes in storage locations, and many more unrelated facts. Thus, the Object-Number Test was selected to measure the ability to remember bits of unrelated material.

An IMS encounters many difficulties in obtaining and accounting for materiel. He must ensure that enough stock is on hand at all times to meet requirements, and determine the locations of missing items which he knows have been ordered and received. To accomplish this, he must hypothesize in an effort to solve inventory discrepancies, and to provide substitute items or alternative sources of supply in the event of materiel shortage. The Letter Sets Test was

selected to measure his ability to form and try out hypotheses in order to find general concepts that would fit sets of data.

The other pair of tests chosen for comparison of speeded and unspeeded effect on predictability measures the Syllogistic Reasoning factor. The Inference Test was given as a speeded test, and the Nonsense Syllogisms Test was given essentially as an unspeeded test by increasing the time limit. This factor relates to the ability to reason from stated premises to their necessary conclusions, an ability deemed to be important in inventory management work.

The Subtraction and Multiplication Test was chosen to measure the ability to manipulate numbers in arithmetical operations rapidly and accurately. The IMS has much computation to do on the job - for example, in determining net assets, projected needs, and demand requirements.

General reasoning was tested, using the Necessary Arithmetic Operations Test. For this test, the examinee has only to decide whether to add, subtract, multiply, or divide to solve arithmetic problems; a numerical answer is not required. Possible replication was again a consideration, since this test had also been given to samples of Medical and Cartographic Technicians.

Since the IMS receives many oral instructions, not only from his supervisor, but also from his customers and suppliers, USCSC No. 135 - Following Oral Directions Test was chosen. This test measures the ability to carry out instructions appropriately when directions are given in the oral mode only. It had been given previously to the Cartographic Technicians.

The last test included in the aptitude battery was USCSC Test No. 170, Federal Service Entrance Examination (FSEE), of which three parts were administered: verbal ability, abstract reasoning ability, and numerical reasoning. Results of the job analysis indicated that a general reasoning test might prove to be a good predictor of job success for the Inventory Management Specialist.

B. The Personal History Questionnaire

As in the first two occupations studied, a Personal History Questionnaire was included to determine the composition of the Inventory Management work force (e.g. age, sex, education), career pattern information, how time is spent on the job, and the effect of selected background variables on prediction of job performance.

Although questions dealing with type of work done and the task list were different for this job, many of the questionnaire items were similar to those used for the Medical Technicians and Cartographic Technicians. The questionnaire focused on four areas: general background (including a series of questions relating to English language facility), education and training, experience and work history, and present duties and responsibilities.

Included with the questionnaire was an extensive task list, containing 184 items, developed in an effort to determine which tasks are performed most frequently, whether there are differences across agencies or grade levels, which tasks are performed in some agencies and not in others, and whether there are differences in the kinds of tasks performed by the three ethnic subgroups studied. The length of the list reflects the variations in job activities across installations, as well as differences among the four agencies observed in visits and interviews, and previously described. Items for the task list were developed from interviews with incumbents and their supervisors, from information contained in the Daily Activity Log (see Appendix A), from Job Descriptions obtained during visits to agencies, and from Civil Service Position Classification Standards. For each of the tasks listed, the respondent was asked to indicate how often he performed the given task as follows:

5 - Significant part of my job every day

- 4 - Substantial part of my job, at least several times a week
- 3 - Part of my job, probably once a week or twice a month
- 2 - Part of my job, but seldom have to do this, perhaps every month or at some regular time of year
- 1 - Not a regularly assigned responsibility, but I sometimes do this
- 0 - Definitely not part of my job; does not apply

A copy of the questionnaire is included as Appendix C.

C. Criterion Measures

In the two previous studies (Medical Technicians and Cartographic Technicians), a Job Knowledge Test was developed as a criterion measure. After preliminary study of the inventory management job disclosed wide variations in specific knowledge and procedures within and among installations, a decision was made not to develop a Job Knowledge Test, but to attempt to measure the variance in performance attributable to job knowledge in the Work Sample Exercise and Criterion Rating Scales.

1. Development of the Work Sample Exercise

(a) Conceptualization

As was seen in preliminary study of the job of Inventory Management Specialist (see Appendix B), the general activities in inventory management at the different job levels and the knowledges and abilities needed to do the work apply across agencies, although there are wide variations in specific procedures. Differences in the physical and technological features of the items managed, the nature of forecasting problems and predictability of demand, the nature of the programs

supported, the degree of automation of the records, the differing forms and internal procedures, the degree of freedom allowed the IMS in making decisions, etc., constrained the selection of a work sample which would be appropriate across installations.

However, a common communication system exists which was developed to expedite procurement, supply, and control of inventory items within and across agencies of the Department of Defense. This is called the Military Standard Requisitioning and Issue Procedure (MILSTRIP). The elements of this system are unique Federal Stock Numbers on all inventory items managed by the Defense Supply Agency and by the separate branches of the Armed Forces, and complex coding procedures which provide a basis for computerized communication and control of the supply system within and across agencies.

It was decided to develop a work sample or performance test, utilizing the "in-basket" technique to simulate the general and procedural framework of inventory management and the role of an inventory manager. Early researchers in the measurement of administrative behavior (Frederiksen, Saunders, and Wand, 1957; Ward, 1959; and Hemphill, Griffiths, and Frederiksen, 1962) had demonstrated that a set of problems in a given administrative situation could be presented as a test. They showed that the written record of the responses could be scored or evaluated on a number of dimensions to yield measures of performance. Such an exercise was termed an "in-basket" test from the in-basket or tray on the desk of most administrators in which incoming communications, reports, or other papers are deposited for attention and action.

In such a test, the person taking the test is provided with instructions and selected background information. He is asked to work on a set of problems in a specific time period as if he were indeed in the job

described in the instructions; that is, actually to make and communicate decisions, to give directions, to respond to requests from others, to ask for information needed to solve problems, to consider priorities in planning and scheduling work, etc.

In developing the IMS Work Sample, it was decided that the setting must be unique, that is, different from any existing agency. A hypothetical agency, U. S. Aerospace Research and Development Administration, was created, as of July 1, 1972. The new Inventory Management Specialist working for this agency was to manage items concerned with life support of crews of two space stations (food, clothing, medical items, spare parts for the environmental and waste disposal system, and some items with a repair cycle). The set of 82 items to be managed was somewhat representative of the range of items managed across present agencies, although specifically described for space station use. Forms and stationery were adapted from samples obtained on visits to installations. By establishing a new and different setting, it was possible to extract from the extensive coding and other procedures only those elements necessary to work on the set of 19 problems provided. Some of the problems were related in content, and information in both background material and other problems could be utilized in taking action. An Action Form was developed which subjects were asked to complete at the end of working time on the problems. On this form, they were to describe briefly the action taken and reasons for their action.

The following materials from the IMS Work Sample are included as Appendix D:

1. IMS Work Sample -- Background and Instructions
2. Chart showing the inventory manager as the hub of a pattern of interaction within and without USARDA.

3. Selected pages from the Inventory Status Reports furnished to the IMS on all items managed
4. Sample problems
5. Action form

(b) Pre-testing

The IMS Work Sample was pretested at the Defense Personnel Support Center in Philadelphia, an installation of the Defense Supply Agency. It was administered in preliminary form to 49 inventory managers from the Medical, Subsistence, and Clothing Directorates in grades 9 and 11, to try out timing, instructions, and understanding of procedures and problems. The Directorates were asked to nominate both male and female subjects according to their representation in the total employed, and also ethnic group members in the same proportion.

Timing set for the pretesting was as follows:

- | | |
|--------|---|
| 15" | Reading of Background and Instructions |
| 15" | Review of instructions and background material |
| 2 hrs. | Working on problems |
| 30" | Completing Action Form (brief description of action(s) taken on each problem and reasons for action(s)) |
| <hr/> | |
| 3 hrs. | |

As a result of the pretesting, instructions were changed and augmented and information in several problems was made more specific. It was decided to increase the actual working time on the problems from two hours to two and one-half hours to allow more time to absorb the procedures and to adapt to the new situation, making total testing time three and one-half hours.

The Criterion Rating Scales, to be described in a later section, were also tried out. Supervisors of the Inventory Managers in the

pretesting sample were asked to provide ratings on them on the newly developed scales for the inventory management job.

The work samples from the pre-testing were read and given global ratings on the effectiveness of the performance on a 5-point scale by several members of the research staff independently. There was fairly consistent agreement in these ratings, which also were representative of a range of performance. However, validities were not computed on the basis of the supervisors' ratings obtained, since conditions were to be changed for the regular testing.

(c) Development of the scoring procedure

The Work Samples obtained in the pre-testing were used in developing the scoring procedure, following an approach described by Crooks (1968, 1972). Scoring dimensions are based on administrative skills and abilities disclosed as important to performance in early study of the inventory management job, and to relevant scoring dimensions used for other "in-basket" exercises. The ten dimensions, listed and described below, fall into five general categories: (1) to describe what kind of action was taken, (2) to describe how action was taken, (3) the amount of work accomplished (productivity), (4) the quality of the action taken (appropriateness), and (5) overall effectiveness of performance in the assumed role:

1. Takes leading action toward solving the problem (asks for information, decision, advice; initiates necessary documents)
2. Uses new procedures in taking action on problems (refers to or uses background information, procedures and codes, forms provided in Work Sample)
3. Shows inventory management knowledge (drafts messages, shows

understanding of MILSTRIP, takes actions not specific to new setting based on present knowledge of inventory management)

4. Analyzes problems (takes into consideration background information and information in other problems to analyze situation, make recommendations, or arrive at decisions beyond what is specifically asked for in problem)
5. Organizes systematically (recognizes priorities)
6. Maintains controls (makes provision for follow-up; records information on inventory records)
7. Follows directions (does what is asked in problem)
8. Amount of work accomplished (number of usual actions taken, number of unusual actions taken, number of items attempted)
9. Quality of action taken (from scoring key developed from pooled judgments of appropriate and inappropriate actions)
10. Rating of overall performance (scorer's judgment on a 7-point scale of how effective subject would be in the assumed role, based on initial handling of a sample of the work)

A list of usual courses of action or "action elements" was accumulated for each problem in the Work Sample, including those analytical in nature, from the Work Samples obtained in pre-testing. These lists were augmented where there were obvious omissions. Members of the research staff then independently coded these lists for scoring dimensions 1 through 7. Final coding was arrived at by pooling these independent judgments and resolving differences. Score 8, amount of work accomplished, was defined as the sum of the number of usual actions taken, number of unusual actions taken, and the number of problems worked on.

In a separate exercise, members of the research staff independently judged the appropriateness or quality of the usual actions taken on each problem by assigning + (appropriate, contributing positively to solution of problem); 0 (neutral, contributing neither positively or negatively to solution of problem); or - (inappropriate or irrelevant to solution of problem) to each action. These judgments were then pooled and reconciled by discussion to arrive at a key for quality of action (Score 9). Weights of +2 or -2 were assigned to those courses of action which the judges agreed were the most or least constructive actions to take toward solving the problems. Score 10 is an overall rating of effective performance on a 7-point scale made by the scorer, after reading and recording all responses.

Appendix E contains lists of Courses of Action for Problems 3, 5, 8, 11, and 19, the problems included in Appendix D. The coding for scoring dimensions 1 through 7 appears in the lefthand margin, and the quality of action key is shown to the left of lettered actions. As will be seen, more than one category may be scored for a single response. More than one action may also be taken on a single problem, so that both depth (complexity of action) and variety (kinds of administrative action) are reflected in the scoring.

In recording a subject's responses the scorer goes through the Work Sample problems in the order in which the written material has been worked on and placed in the envelope. The scorer reads what has been written by the subject on each problem in turn, in the process of taking action, and also what has been written on the Action Form. Then, by reference to the list of courses of action for the problem being considered, entries are made on the scoring form (see Appendix F) for the courses of action taken,

the coded dimensions and keyed responses. After all problems worked on by the subject have been read and recorded, the totals of the columns on the scoring form are entered on the recap sheet. The scorer is instructed to make the overall rating of performance as soon as all responses to problems are read and recorded, but prior to totaling the columns, to avoid being influenced by the magnitude of the scores on the various dimensions.

(d) Reliability of scoring ,

After preliminary training in this scoring procedure, a number of Work Samples from the pre-test sample was scored and checked, with further training given where needed. Sixty-six tests were independently scored by two scorers as a reliability check. Correlations between the two sets of scores are shown in Table 3 below.

Table 3
Reliability of Independent
Scoring of Work Sample by Two Scorers

Scoring Dimension	Description	r
1	Takes leading action to solve problems	.91
2	Uses new procedures	.96
3	Shows IM knowledge	.95
4	Analyzes problems	.82
5	Organizes systematically	.91
6	Maintains controls	.94
7	Follows directions	.93
8	Productivity	.98
9	Quality of actions	.96
10	Rating of overall performance	.91

The lowest reliability coefficient (.82) was obtained for Score 4, Analyzes problems, which is probably due to the difficulty of interpreting wide variation in the specificity of this type of response in terms of the described courses of action. Reliability was judged to be satisfactory on all dimensions and double scoring was discontinued. However, quality control was done throughout the scoring by spot-checking and reinforcement of training. Where tests were double-scored, the scores were averaged for inclusion in the data. Scores did not have background information such as sex, ethnic identification, or job level on the subjects.

2. Performance Rating Scales

The anchored rating scale format used in the Medical Technician and Cartographic Technician phases of the study was again utilized to obtain criterion ratings of job performance. From interviews with Inventory Management Specialists and others closely associated with their work, abilities, skills, and personal characteristics were identified which were considered important to job performance (see Appendix B). By combining and refining, a list of 21 aspects of job performance was compiled, as follows:

Job knowledge

Interest in the job

Learning ability

Cooperativeness, good interpersonal relations

Conscientiousness, reliability, dependability

Organization and planning of work

Practical judgment, logical thinking, common sense

Adaptability, flexibility

Responsibility, accountability

Good memory

Low need for supervision, independence, self-reliance

Ability to communicate - oral and written

Aggressiveness

Perseverance, patience, concentration

Accuracy

Initiative

Productivity - amount of work accomplished

Stability under pressure

Decisiveness

Thoroughness, attention to detail, vigilance

Ingenuity in solving problems

In further interviews at another location, this list was presented to each interviewee. He or she was asked to mark the ten most important in their judgment to successful performance of the inventory management job. From the pooling of these judgments, nine aspects of job performance were identified as being considered most important:

... ability to plan and organize work

... interest and pride in the work

... ability to learn on the job

... ability to communicate effectively

... technical knowledge

... adaptability and stability under pressure

... dependability and perseverance

... ability to make sound judgments

... ability to work well with others

Rating scales were developed around these aspects, with a tenth scale added to elicit a rating of overall performance.

The scales were defined in a short paragraph, not labeled, which included examples of favorable and unfavorable behavior as related to the work of inventory manager. Behavioral descriptions were also used as reference points at the top, middle, and bottom of the vertical, unnumbered scales, on one side of the scale in general terms and on the other side in more specific terms.

As in the Medical Technician and Cartographic Technician phases of the study, supervisors were asked to make ratings on each scale for a fictitious incumbent, in this case an inventory manager (Mel Stripp), whose characteristic behavior was described on the page opposite each scale. These ratings were obtained in an attempt to disclose stylistic variations or bias in rating behavior.

Detailed instructions were given in the beginning of the rating booklet (see Appendix G), and numbered spaces for listing inventory managers to be rated by the supervisor were provided inside the back page. The supervisor was asked to indicate the length of time he had supervised each inventory manager he rated. Rating was done by supervisors meeting in groups, with the researcher leading them through the rating procedure. The purpose was to focus on the definitions of the scales, one at a time, and to emphasize the experimental nature of the study and the importance of valid ratings.

The supervisors were asked to make their ratings for all ratees on one scale at a time, by drawing a line across the vertical scale at the appropriate point for each ratee, and identifying it by the number of the ratee as listed on the back page. The supervisor was also asked to rate Mel Stripp on Scales 2 through 9 (Mel was given a rating on Scale 1 as an example).

Importance Rating Scales

After each supervisor completed the ratings, he or she was asked to indicate on a form how important the characteristics described on the scales were to "proper" job performance from "Not Important - Irrelevant to Proper Job Performance" at the low end, to "Important - Contributes to Proper Job Performance" at the midpoint, and "Very Important - Essential to Proper Job Performance," at the high end of the scale. A copy of this form is included with Appendix G.

V. Summary

The total testing time involved in the administration of the various measures to Inventory Management Specialists was approximately one and one-half days. The aptitude tests and Personal History Questionnaire took up the first day, and the work sample was administered on a half-day following. The supervisors were assembled in groups of 10 to 15 to go through the criterion rating exercise, apart from the testing. All administrations were carried out by members of the research staff. The participants were reassured at each testing session that responses and test scores of individuals would not be seen by anyone at their installations or in the government, and that only group results would be reported. Any participant who wanted his individual results was asked to write his name and address on his testing envelope. Otherwise, the subjects were identified only by code number. All materials were removed from the testing location after each session.

The results of the analyses of the data obtained for Inventory Management Specialists will be contained in a comprehensive report of the project, to be published in 1972. Results for Medical Technicians and Cartographic Technicians will be included, and the findings in all three phases will be described and inter-related.

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Appendix A

A-1 Instructions for the Daily Activity Log

A-2 Activity Check List

A-3 Sample Daily Activity Log

Appendix A-1

Instructions for the DAILY ACTIVITY LOG

The purpose of the Daily Activity Log is to study the range of activities of the Inventory Management Specialist and the pattern of his interaction with others in the process of accomplishing his work. The log is to be kept for five days. If interruptions occur because of illness, vacation, or other reason, continue keeping the log until five full days' activities have been recorded. Do not record a partial day, and start a new log each morning (two pages for each day).

The form designed for this purpose has been divided into half-hour intervals, so that a number of entries may be made in the cells for any one time period. Enter the starting time at the top of the column. A minimum of writing is called for by the use of code letters, checks, and numbers. A sample lot for one day's activities is attached. Note that when an activity is begun in one time period and continues into another, it should only be recorded in the time period in which it is begun. Indicate that it is continuing by drawing a vertical wavy line into the next time period (see example in sample log).

The order of entry in the form is as follows:

1. Activity code (by letter): A list of activities is attached. Add letters for activities not covered, with a brief description of the activity
2. Where activity takes place (check column)
 - a. At desk
 - b. Away from desk
3. Contacts with others: Enter number of individuals involved in activity (1, 2, 3, etc., not counting yourself)

4. Medium used in contact (check column)
 - a. Face-to-face
 - b. Telephone (include tele-receivers, intercoms, etc.)
 - c. Writing
5. Identification of contact (check column)
 - a. Superior (include here not only your direct superior but anyone else of higher classification than yours who may or may not be your functional superior)
 - b. Peer (include here your counterparts, others who are at the same level in your own division or in other divisions of your agency, or in other locations of your agency)
 - c. Subordinates (include here anyone at a lower level in your division or in other divisions of your agency or in other locations of your agency from whom you ask services or to whom you give information)
 - d. Other government personnel (include here other contacts in the government but outside your agency)
 - e. Outsiders (include here contacts outside the government)
 - f. Personal (self-explanatory)
6. Location of contact (check)
 - a. Within directorate
 - b. Same installation, other directorates or offices
 - c. Other location, same agency
 - d. Other government agency
 - e. Outside government

When five days' activity logs have been completed, please enclose in envelope provided and mail to Educational Testing Service. Your records will not be seen by anyone except the research team. We appreciate very much your willingness to participate in the study of the Inventory Management classification. Any inquiries may be addressed to Dr. Joel T. Campbell, Educational Testing Service, Princeton, New Jersey 08540.

Appendix A-2

DAILY ACTIVITY LOG

Activity check list

Code
Letter

- A Arranging for contract negotiations, purchase authorizations; coordinating with technical operations
- B Determining location/quantity of supplies, need for adjusting requirements; acceptability of and arrangement for item substitution
- C Arranging for redistribution/surplus sales
- D Coordinating repair cycle
- E Planning or scheduling work
- F Preparing reports
- G Reading mail, directives, computer output, delivery orders
- H Supervising or training others
- I Expediting; follow-up; checking discrepancies, shortages, surpluses, back orders
- J Maintaining reference material and policy manuals
- K Correspondence (including writing internal memos or messages)
- L Attending meetings, training or otherwise
- M Analyzing, developing policies and procedures
- N Lunch or coffee breaks

Add letters for other activities not covered, and brief description

O

P

Q

DAILY ACTIVITY LOG

Name <u>Stanley Walker</u>		Agency <u>DSA - DPSC</u>		Division <u>C4T</u>		Day of Week <u>Mon.</u>		Date <u>8/3</u>						
Starting time this sheet <u>8:00 AM</u>	Activity Code	WHERE		Face-to-face	Telephone	Writing	WITH WHOM			Within directorate	Same install. other	LOCATION		
		At desk	Away from desk				Subordinates	Other Govt. personnel	Outsiders			Personal	Other location same agency	Other Govt. dept.
Start <u>8:00</u>	<u>G</u>	✓				✓								
Stop <u>8:30</u>	<u>K</u>	✓												
Start <u>8:30</u>	<u>L</u>		✓	✓						✓				
Stop <u>9:00</u>	<u>L</u>													
Start <u>9:00</u>	<u>L</u>													
Stop <u>9:30</u>	<u>N</u>			✓										
Start <u>9:30</u>	<u>A</u>	✓								✓				
Stop <u>10:00</u>	<u>A</u>	✓								✓				
Start <u>10:00</u>	<u>B</u>	✓								✓				
Stop <u>10:30</u>	<u>B</u>	✓								✓				
Start <u>10:30</u>	<u>I</u>	✓								✓				
Stop <u>11:00</u>	<u>I</u>													
Start <u>11:00</u>	<u>A</u>		✓	✓						✓				
Stop <u>11:30</u>	<u>A</u>													
Start <u>11:30</u>	<u>A</u>													
Stop <u>12:00</u>	<u>A</u>													
Start <u>12:00</u>	<u>N</u>		✓											
Stop <u>12:30</u>	<u>N</u>													

Appendix A-3

DAILY ACTIVITY LOG

Name <u>Stanley Walker</u>	Starting time this sheet	Activity Code	WHERE		Contacts No. individuals	Agency				Division				Day of Week <u>Mon.</u>	Date <u>8/3</u>	LOCATION			
			At desk	Away from desk		Face-to-face	Telephone	Writing	Superior	Peer	Subordinates	Other govt. personnel	Outsiders			Personal	Within director- ate	Same install- other	Other location same agency
Start <u>12:30</u>		<u>E</u>	✓							✓									
Stop <u>1:00</u>																			
Start <u>1:00</u>		<u>F</u>	✓																
Stop <u>1:30</u>																			
Start <u>1:30</u>		<u>C</u>		✓	2	✓					✓								
Stop <u>2:00</u>																			
Start <u>2:00</u>		<u>A</u>	✓		1			✓											
Stop <u>2:30</u>								✓											
Start <u>2:30</u>		<u>B</u>	✓		2			✓											
Stop <u>3:00</u>								✓											
Start <u>3:00</u>		<u>I</u>	✓	✓	4	✓		✓			✓								
Stop <u>3:30</u>								✓											
Start <u>3:30</u>		<u>J</u>	✓																
Stop <u>4:00</u>																			
Start																			
Stop																			
Start																			
Stop																			

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Appendix B

- B-1 Knowledges and Abilities Required, Inventory Management Series GS-2010
- B-2 Basic Abilities, Personal Qualities and Characteristics, and Managerial Skills Needed for Inventory Management, Summarized from Interviews
- B-3 Areas of Variation Among and Between Inventory Management Jobs
- B-4 Elements Common to All Inventory Management Jobs Observed
- B-5 Elements Differing Across Inventory Management Jobs or Agencies

Appendix B-1

Knowledges and Abilities Required, Inventory Management Series GS-2010¹

Knowledges

1. Knowledge of the principles, procedures, techniques and practices followed in the performance of inventory management functions
2. Knowledge of the organization, regulations and methods of the overall agency supply system
3. Knowledge of the technical features and uses of items of materiel and their relationship to supply and demand conditions
4. Knowledge of the relationship of procurement and fiscal considerations, and of such specialized activities as data processing, transportation, storage, cataloging, maintenance, disposal, and others to inventory management processes and determinations

Abilities

1. Ability to initiate and maintain effective personal contacts and relationships with representatives of other organizations, subject-matter specialists, contractors, and others
2. Ability to arrange and conduct conferences, make formal presentations, and train and guide other personnel
3. Ability to analyze varied data; determine significant elements, factors and considerations; and synthesize findings in the form of inventory management judgments and determinations
4. Ability to absorb and interpret voluminous and changing procedural, methodological and policy guides
5. Ability to choose and reach decisions in the face of conflicting considerations and alternatives
6. Ability to coordinate a variety of management actions, such as procurement, repair, and redistribution in solving materiel support problems

¹ From U. S. Civil Service Position Classification Standards, April 1966.

Appendix B-2

Basic Abilities, Personal Qualities and Characteristics, and Managerial Skills Needed for Inventory Management,

Summarized from Interviews

Basic Abilities

Memory/instant recall
Breadth of knowledge about supply operations (from education, experience, range of interest)
General ability to work with numbers
Reading comprehension (needs to read and understand)
Ability to express self orally (telephone, presentation of reports)
Ability to express self well in writing
Clerical ability/accuracy (names and numbers)
Logical thinking/analytical mind (decision-making process)
Commonsense/good judgment/practicality
Good health/stamina
Ability to follow both written and verbal instructions
Productivity
Ability to learn and adapt to new procedures/quick reaction to changes
Ability to concentrate
Legible handwriting
Foresightedness

Personal Qualities and Characteristics

Attention to detail
Ability to take instruction
Balance in judgment
Stability under pressure
Ability to take independent action
Ability to relate data on item to function of item
Decisiveness
Thoroughness
Vigilance
Inquisitiveness/curiosity/inquiring mind
Enthusiasm (consider job a challenge)
Self-reliance/self-confidence/independence (work independently)
Self-motivation/commitment/need for achievement/conscientiousness/ambition
(expresses desire for additional assignments)
Initiative
Ingenuity
Flexibility/tolerance for changing situations/adaptability
Emotional stability/resistance to stress/even-tempered (work well under pressure) (work with constant interruption)
Reliability/dependability
Responsibility/accountability
Persistence and drive/aggressiveness
Perseverance/patience

Managerial Skills

Administrative Skills

- Organization of work
 - Planning (short and long range)
 - Timing (setting priorities)
 - Getting work done (meeting deadlines)
- Systematic allocation of time, scheduling
- Analysis of problems for decision-making
 - Previous history
 - Policy or precedent
 - Information or advice needed
 - Related problems
 - Resources (human/financial/references/computer)
 - Implications of alternative actions
- Implementation of decisions
 - Knowledge of procedures
- Establishing controls
 - Reports
 - Systematic follow-up

Interpersonal Skills

- Ability to get along well with people
- Ability to establish good relationships with co-workers, customers, and other divisions (people who receive and give service and information)
- Tact, diplomacy
- Patience
- Cooperativeness

Appendix B-3

Areas of Variation Among and Between Inventory Management Jobs

Variation among and between inventory management jobs may occur in relation to the following constraints:

1. The physical and technological features of the items managed
2. The nature of forecasting problems and the predictability of demand
3. The nature of the programs supported
4. The responsiveness of supply systems to changes in demand and unexpected needs
5. The degree of freedom from technically limiting controls imposed by supervision or by instructions, established procedures, and other guides
6. The duties and responsibilities depending on the foregoing
7. Although the MILSTRIP system is used by all Inventory Management Specialists, forms, data processing capabilities and general internal procedures may differ; the degree of automation may also differ.

All do

1. Initiation of action leading to cataloging or identification of items
2. Computation of materiel requirements or estimates for budget, procurement, disposal, provisioning, or other special programs
3. Controlling and converting funds into materiel of the proper kind and quality, in correct quantities at the proper time and for delivery to the correct places
4. Initiation of action leading to procurement
5. Controlling stock in, due in, or planned for the distribution system on a monetary basis
6. Controlling the distribution or redistribution of stock within the supply system
7. Initiation of action leading to disposal of unneeded items
8. Other related inventory management activities

All do not do

1. Planning and coordinating supply actions to assure properly phased support to major items of equipment and/or weapons systems in test phases, in production, in service, and during phase-out periods (DISC/ASO)
2. Initiating or requiring maintenance and/or modification while items are in the inventory (ASO)
3. Major and minor assembly (Medical, C & T)

Appendix B-4

Elements Common to All Inventory Management Jobs Observed

MILSTRIP: Military Standard Requisitioning and Issue Procedure

Signature Authority: Limitation of financial commitment by Inventory Management Specialist on own signature

Problem areas (some form of problem observed in all jobs; degree might differ)

1. Back orders
2. Excess stock--credit position
3. Procurement problems: lead time, availability of suppliers, specifications problems, litigation, delivery
4. Recommendations for disposal--all possible alternatives to be explored
5. Data processing problems
6. Special program requirements not in demand forecast
7. Substitution of items--Technical Operations decides
8. Obsolescence
9. Shelf-life--unusable items
10. Priority demands--special handling required (emergency orders)
11. Constant procedural changes
12. Special reports
13. Redistribution or reconsignment of items
14. Excessive quantities ordered by customers
15. Price differences on items among suppliers or errors in price
16. Credit return (customer or depot asks to return items for credit)
17. Customer inquiries
18. Discrepant materials in system (report of unsatisfactory material by customer--specifications, packaging, etc.)
19. Unstable demand (fluctuating demand)
20. Deleted items
21. Items not moving
22. Inventory discrepancies (gains or losses)
23. Excessive requisitions from customers (to get around ceiling on orders)
24. Customers request unauthorized packs, amounts, container sizes
25. Customers do not follow procedures in using material (first in, first out)
26. Material improperly identified by customers
27. Austere funding, requiring recasting of order cycle and amount
28. Quality control

Appendix B-5

Elements Differing Across Inventory Management Jobs or Agencies

1. Patterns of interaction (in some areas)
2. Most forms
3. Types of reports received and scheduling of them
4. Basic system (Management by Exception in DISC and ASO)
5. Dealing directly with contractors or vendors (on delivery information, etc.--not prices): ASO, SAAMA and AF do; DISC and DPSC do not
6. Local procurement (DPSC Subsistence)
7. Inventory Management Specialist briefs in person on large procurements before directorate heads and on stipulated amounts before Commanding Officer (in Subsistence, department heads did all briefing)
8. Number of items handled, on basis of:
volume, dollar value, difficulty of procurement, zero safety level, VIP items, excessive back orders, items with past history of discrepancies
9. Technical Operations varies in amount of responsibility and services given in various directorates or agencies: important in DPSC, less important in ASO because of Weapons Bureaus, etc. (In SAAMA, Technical Operations sections within Inventory Management area.)
10. Distribution for both direct usage and resale in some agencies
11. Manner of keeping records (physical and procedural)
12. Computation of requirements for buys, and procedures in general, depending on class of items
13. Characteristics of items posing different or unique problems: shelf-life, size tariffs, repair cycle, priorities, obsolescence, special packaging and handling, retro-fit (design change requiring modification of existing equipment)

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Appendix C

C-1 Personal History Questionnaire

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Appendix C-1

PERSONAL HISTORY QUESTIONNAIRE

For a study of job success in the inventory management field, we need to know about the backgrounds of persons in that field. Your assistance in completing this questionnaire will give us this important information.

This is a research study, and your answers will be treated confidentially. No information about you as an individual will be given to anyone at your installation or to anyone else in government.

On the following pages you will find a number of questions concerning your personal background. Please try to answer them as accurately and completely as you are able. There are no "right" or "wrong" answers. You may leave out any particular question if you wish, but we hope you will answer every question.

In most cases, you are to record your answers by making check marks in the squares on the right-hand side of each page. Please mark only one answer for each question unless you are instructed otherwise.

For some of the questions, you are asked to write the information requested in the blank spaces provided. Please read each question carefully, so that you will know what you are expected to do.

Remember, your responses will be kept strictly confidential.

Thank you for your cooperation.

Research Staff, Special Projects
Educational Testing Service
Princeton, N. J. 08540

Prepared by
EDUCATIONAL TESTING SERVICE
(Experimental edition - for research purposes only)

A. GENERAL BACKGROUND

1. What is your age?

Check one

1. Less than 20 years
2. 20 to 29 years
3. 30 to 39 years
4. 40 to 49 years
5. 50 to 59 years
6. 60 years or older

1. ☐
2. ☐
3. ☐
4. ☐
5. ☐
6. ☐

2. What is your sex?

Check one

1. Male
2. Female

1. ☐
2. ☐

3-4. Please indicate the highest level of education completed by your parents or guardians.

3.

4.

Father's
education

Mother's
education

Check one

Check one

1. 8th grade, or less
2. 9th or 10th grade
3. 11th or 12th grade
4. 1 or 2 years of college or
other training beyond high
school
5. 3 or 4 years of college
6. 1 year or more of graduate
school

- | | |
|-----------------------------|-----------------------------|
| 1. ☐ | 1. ☐ |
| 2. ☐ | 2. ☐ |
| 3. ☐ | 3. ☐ |
| 4. ☐ | 4. ☐ |
| 5. ☐ | 5. ☐ |
| 6. ☐ | 6. ☐ |

5. Which of the following comes closest to describing your father's main occupation while you were growing up?

Check one

- | | |
|--|------------------------------|
| 01. Unskilled worker, or laborer (farm work, fisherman, filling station attendant) | 01. ☐ |
| 02. Semiskilled worker (machine operator, bus driver, meat cutter) | 02. ☐ |
| 03. Service worker (policeman, fireman, barber, military noncommissioned officer) | 03. ☐ |
| 04. Skilled worker or craftsman (carpenter, electrician, plumber) | 04. ☐ |
| 05. Sales or clerical worker (insurance salesman, bookkeeper, secretary, office worker, bank teller, mail carrier) | 05. ☐ |
| 06. Owner, manager or partner of a small business; lower level governmental official; military commissioned officer | 06. ☐ |
| 07. Profession requiring a bachelor's degree (engineer, elementary or secondary school teacher) | 07. ☐ |
| 08. Owner or high-level executive of a large business, or high-level government official | 08. ☐ |
| 09. Profession requiring an advanced college degree, or proficiency in the arts (doctor, lawyer, college professor, actor, artist, writer) | 09. ☐ |
| 10. Something else | 10. ☐ |
| 11. Father's main occupation unknown | 11. ☐ |

6. Which one of the following comes closest to describing your mother's main occupation while you were growing up?

	<u>Check one</u>
01. Housewife -- she did not work steadily outside the home.	01. ☐
02. Unskilled worker or laborer (laundry worker, farm worker)	02. ☐
03. Semiskilled worker (machine operator, wrapper, assembler)	03. ☐
04. Service worker (beautician, waitress)	04. ☐
05. Skilled worker or craftsman (baker, inspector)	05. ☐
06. Sales or clerical worker (insurance saleswoman, bookkeeper, secretary, bank teller, office worker; practical nurse)	06. ☐
07. Owner, manager or partner of a small business; lower level governmental official; military commissioned officer; registered nurse	07. ☐
08. Profession requiring a bachelor's degree (social worker, elementary or secondary teacher)	08. ☐
09. Owner or high-level executive of a large business or high-level governmental agency	09. ☐
10. Profession requiring an advanced college degree (doctor, lawyer, college professor, etc.)	10. ☐
11. Something else	11. ☐
12. Mother's main occupation unknown	12. ☐

7. While you were growing up, was a language other than English spoken in your home?

Check one

- | | |
|--------|-----------------------------|
| 1. Yes | 1. ☐ |
| 2. No | 2. ☐ |

(If your answer is "No," skip questions 8-15 and go on to Section B, question 16.)

8-15. (To be answered only if you answered "Yes" to question 7.)

8. Other than English, what was the language spoken most often in your home when you were growing up?

Check one

- | | |
|----------------------------------|-----------------------------|
| 1. Mexican Spanish | 1. ☐ |
| 2. Puerto Rican or Cuban Spanish | 2. ☐ |
| 3. "Tex-Mex" | 3. ☐ |
| 4. Italian | 4. ☐ |
| 5. French | 5. ☐ |
| 6. German | 6. ☐ |
| 7. Other (Specify: _____) | 7. ☐ |

9. How much of the time was that language spoken in your home?

Check one

- | | |
|--------------------------|-----------------------------|
| 1. Very little | 1. ☐ |
| 2. About 1/4 of the time | 2. ☐ |
| 3. About 1/2 of the time | 3. ☐ |
| 4. About 3/4 of the time | 4. ☐ |
| 5. Almost all the time | 5. ☐ |

10. At the present time, how easily can you read and understand a newspaper in that language?

Check one

- | | |
|---|-----------------------------|
| 1. With much difficulty | 1. ☐ |
| 2. With some difficulty, but can get by | 2. ☐ |
| 3. With no difficulty at all | 3. ☐ |

11. At the present time, how easily can you carry on a conversation in that language?

Check one

- | | |
|---|-----------------------------|
| 1. With much difficulty | 1. ☐ |
| 2. With some difficulty, but can get by | 2. ☐ |
| 3. With no difficulty at all | 3. ☐ |

12. At the present time, how does your reading knowledge of that language compare with your knowledge of English?

Check one

- | | |
|------------------------------|-----------------------------|
| 1. Read that language better | 1. ☐ |
| 2. About the same | 2. ☐ |
| 3. Read English better | 3. ☐ |

13. At the present time, how does your speaking knowledge of that language compare with your knowledge of English?

Check one

- | | |
|-------------------------------|-----------------------------|
| 1. Speak that language better | 1. ☐ |
| 2. About the same | 2. ☐ |
| 3. Speak English better | 3. ☐ |

14. Is that language sometimes used on the job now?

Check as many
as apply

1. Yes, with co-workers
2. Yes, with supervisors
3. No

1. ☐
2. ☐
3. ☐

15. Are instructions from your supervisor given in that language?

Check one

1. Yes, usually
2. Yes, occasionally
3. No

1. ☐
2. ☐
3. ☐

B. EDUCATION AND TRAINING

16. What is the highest level of education you have completed?

Check one

- | | |
|---|-----------------------------|
| 1. 8th grade, or less | 1. ☐ |
| 2. 9th or 10th grade | 2. ☐ |
| 3. 11th or 12th grade or received High School Equivalency Diploma (GED) | 3. ☐ |
| 4. After grade 12, 1 or 2 years at a technical or business institute, or the equivalent | 4. ☐ |
| 5. 1 or 2 years of college | 5. ☐ |
| 6. 3 or 4 years of college | 6. ☐ |
| 7. 1 year or more of graduate school | 7. ☐ |

17. What was your major area of study in high school?

Check one

- | | |
|------------------------------------|-----------------------------|
| 1. Academic or college preparatory | 1. ☐ |
| 2. General | 2. ☐ |
| 3. Business or commercial | 3. ☐ |
| 4. Home economics | 4. ☐ |
| 5. Vocational or industrial arts | 5. ☐ |
| 6. Other (Specify: _____) | 6. ☐ |

18. What was your approximate standing in your high school graduating class?

Check one

- | | |
|----------------------|-----------------------------|
| 1. In the top 1/4 | 1. ☐ |
| 2. In the second 1/4 | 2. ☐ |
| 3. In the third 1/4 | 3. ☐ |
| 4. In the bottom 1/4 | 4. ☐ |
| 5. Did not graduate | 5. ☐ |

19. What type of high school did you attend most?

Check one

- | | |
|----------------|-----------------------------|
| 1. Public | 1. ☐ |
| 2. Parochial | 2. ☐ |
| 3. Independent | 3. ☐ |

20. Where did you receive most of your high school (or equivalent) education?

Check one

- | | |
|-----------------------------------|-----------------------------|
| 1. United States | 1. ☐ |
| 2. Mexico | 2. ☐ |
| 3. Puerto Rico | 3. ☐ |
| 4. Cuba | 4. ☐ |
| 5. Canada | 5. ☐ |
| 6. Other country (Specify: _____) | 6. ☐ |

21. What was your major field of study in college?

Check one

- | | |
|--|------------------------------|
| 1. Did not attend college | 01. ☐ |
| 2. Mathematics, physics, chemistry, or engineering | 02. ☐ |
| 3. Biology, physiology, or bacteriology | 03. ☐ |
| 4. Psychology or sociology | 04. ☐ |
| 5. Business or commerce, accounting, economics | 05. ☐ |
| 6. History or political science | 06. ☐ |
| 7. Foreign languages | 07. ☐ |
| 8. English literature, speech, or journalism | 08. ☐ |
| 9. Secondary or elementary education | 09. ☐ |
| 10. Arts (art, music, drama, etc.) | 10. ☐ |
| 11. Some field not mentioned (Specify:
_____) | 11. ☐ |

22. How much formal (in school, or special classes not work-related) training in the inventory management field did you receive before entering the 2010 series?

Check one

- | | |
|--|-----------------------------|
| 1. <u>None, or hardly any:</u> less than 4 credits in a high school, college or business school, and less than one month of other instruction (such as classes in the military, or in a commercial organization or governmental activity). | 1. ☐ |
| 2. <u>A moderate amount:</u> 4 to 11 credits in a high school, college, or business school, or 2 to 6 months of other instruction. | 2. ☐ |
| 3. <u>Quite a lot:</u> 12 or more credits in a high school, college or business school, or more than six months of other instruction. | 3. ☐ |

23. Where was most of this training received?

Check one

- | | |
|--|-----------------------------|
| 1. High school | 1. ☐ |
| 2. Junior college | 2. ☐ |
| 3. Four-year college | 3. ☐ |
| 4. Technical or business institute
(including correspondence courses) | 4. ☐ |
| 5. In the Military | 5. ☐ |
| 6. At a civilian governmental activity | 6. ☐ |
| 7. At a non-governmental commercial
organization | 7. ☐ |
| 8. Other location | 8. ☐ |
| 9. No prior formal training | 9. ☐ |

24. Where did you receive most of your on-the-job training in the inventory management field, before entering the 2010 job series?

Check one

- | | |
|---|-----------------------------|
| 1. At a technical or business institute
(work-study program) | 1. ☐ |
| 2. In the Military | 2. ☐ |
| 3. At a civilian governmental activity | 3. ☐ |
| 4. At a non-governmental commercial
organization | 4. ☐ |
| 5. Other | 5. ☐ |
| 6. No prior on-the-job training | 6. ☐ |

25. How many college-level credits have you earned in subjects related to inventory management, after entering the 2010 job series?

Check one

- | | |
|---------------|-----------------------------|
| 1. None | 1. ☐ |
| 2. 1-3 | 2. ☐ |
| 3. 4-6 | 3. ☐ |
| 4. 7-9 | 4. ☐ |
| 5. 10 or more | 5. ☐ |

26. Since entering the 2010 series, how many months of training have you received for your job? Include any periods of training in a classroom setting such as a training center, whether at your job location or elsewhere.

Check one

- | | |
|-----------------------|-----------------------------|
| 1. Less than 1 month | 1. ☐ |
| 2. 1 or 2 months | 2. ☐ |
| 3. 3 or 4 months | 3. ☐ |
| 4. 5 or 6 months | 4. ☐ |
| 5. 7 or 8 months | 5. ☐ |
| 6. More than 8 months | 6. ☐ |

27. What kind of test were you required to take when you were hired or reclassified as an inventory manager?

Check as many as apply

- | | |
|---|-----------------------------|
| 1. None | 1. ☐ |
| 2. Federal Service Entrance Examination | 2. ☐ |
| 3. Other (please specify: _____) | 3. ☐ |

28. What is the highest level of mathematics you are required to use?

Check one

- | | |
|---|-----------------------------|
| 1. Basic (addition, subtraction, multiplication, division, etc.) | 1. ☐ |
| 2. Intermediate (calculations involving fractions, decimals and percentages) | 2. ☐ |
| 3. Advanced (algebra, geometry, and statistics) | 3. ☐ |
| 4. Very advanced (advanced mathematics or statistics, e.g., calculus, topology, vector analysis, factor analysis, probability theory, etc.) | 4. ☐ |

C. EXPERIENCE AND WORK HISTORY

29. What was your full-time job just prior to going into inventory management work?

Check one

- | | Inventory
Management related | Non-Inventory
Management related |
|---|---------------------------------|-------------------------------------|
| 01. In commercial organization (company, store, etc.) | 01. ☐ | 01. ☐ |
| In government non-military activity | | |
| 02. Supply operations | 02. ☐ | 02. ☐ |
| 03. Technical operations | 03. ☐ | 03. ☐ |
| 04. Procurement | 04. ☐ | 04. ☐ |
| 05. Warehouse or depot | 05. ☐ | 05. ☐ |
| 06. Data Processing or Accounting | 06. ☐ | 06. ☐ |
| 07. Other | 07. ☐ | 07. ☐ |
| If in any of the above, give title of job and grade | | |
| Title _____ Grade _____ | | |
| 08. In Military service | 08. ☐ | 08. ☐ |
| Give military rank when discharged _____ | | |
| 09. Other than above | 09. ☐ | 09. ☐ |
| Specify: _____ | | |
| 10. Did not have previous full-time job | | 10. ☐ |

30-31. Why did you choose a career in inventory management?

	30. <u>Main Reason</u> <u>Check one</u>	31. <u>Second Reason</u> <u>Check one</u>
01. General interest in the supply operationsfield	01. ☐	01. ☐
02. Influence of friends or relatives	02. ☐	02. ☐
03. Influence of counselors	03. ☐	03. ☐
04. Influence of recruiters	04. ☐	04. ☐
05. Expected income	05. ☐	05. ☐
06. Job availability	06. ☐	06. ☐
07. Job security	07. ☐	07. ☐
08. Training opportunities--in military service, through scholarships, apprenticeships, etc.	08. ☐	08. ☐
09. Desire to work for the government	09. ☐	09. ☐
10. "Just fell into it"	10. ☐	10. ☐
11. Other (Specify: _____)	11. ☐	11. ☐

32. Were you in the 5-7-9 Career Development Program?

Check one

1. No
2. Yes, in the inventory management field (GS 2010)
3. Yes, in another field

1. ☐

2. ☐

3. ☐

33. At what grade level did you enter the inventory management field (2010)?

Circle one

GS-1

GS-2

GS-3

GS-4

GS-5

GS-6

GS-7

GS-8

GS-9

GS-10

GS-11

34. What is your present grade?

Circle one

GS-7

GS-8

GS-9

GS-10

GS-11

GS-12

35. What is the total number of years you have worked as an inventory management specialist in the 2010 series?

Check one

- | | |
|-----------------------|-----------------------------|
| 1. Less than 2 years | 1. ☐ |
| 2. 2-3 years | 2. ☐ |
| 3. 4-7 years | 3. ☐ |
| 4. 8-11 years | 4. ☐ |
| 5. 12-15 years | 5. ☐ |
| 6. 16-19 years | 6. ☐ |
| 7. 20 years or longer | 7. ☐ |

36. What is the total number of years you have done the work of an inventory manager, but not in the 2010 series?

Check one

- | | |
|-----------------------|-----------------------------|
| 1. Less than 2 years | 1. ☐ |
| 2. 2-3 years | 2. ☐ |
| 3. 4-7 years | 3. ☐ |
| 4. 8-11 years | 4. ☐ |
| 5. 12-15 years | 5. ☐ |
| 6. 16-19 years | 6. ☐ |
| 7. 20 years or longer | 7. ☐ |

37. How long have you been employed at the supply installation where you now work?

Check one

- | | |
|-----------------------|-----------------------------|
| 1. Less than 6 months | 1. ☐ |
| 2. 6-11 months | 2. ☐ |
| 3. 1-3 years | 3. ☐ |
| 4. 4-7 years | 4. ☐ |
| 5. 8 years or longer | 5. ☐ |

38. How many years have you spent in federal civil service other than as a 2010 inventory manager? (Do not include time spent in military duty.)

Check one

- | | |
|-----------------------|-----------------------------|
| 1. None | 1. ☐ |
| 2. Less than 2 years | 2. ☐ |
| 3. 2-3 years | 3. ☐ |
| 4. 4-7 years | 4. ☐ |
| 5. 8-11 years | 5. ☐ |
| 6. 12-15 years | 6. ☐ |
| 7. 16-19 years | 7. ☐ |
| 8. 20 years or longer | 8. ☐ |

39. How long were you on active duty in the armed forces?

Check one

- | | |
|--|-----------------------------|
| 1. Have never been in the armed forces | 1. ☐ |
| 2. Less than 1 year | 2. ☐ |
| 3. 1-3 years | 3. ☐ |
| 4. 4-7 years | 4. ☐ |
| 5. 8 years or longer | 5. ☐ |

40. Which of the following do you feel is the one most important thing about your job?

Check one

- | | |
|-------------------------------|------------------------------|
| 01. Starting salary | 01. ☐ |
| 02. Future salary | 02. ☐ |
| 03. Job security | 03. ☐ |
| 04. Good supervisors | 04. ☐ |
| 05. Good fellow workers | 05. ☐ |
| 06. Working conditions | 06. ☐ |
| 07. Opportunity for promotion | 07. ☐ |
| 08. Good fringe benefits | 08. ☐ |
| 09. Serving others | 09. ☐ |
| 10. Serving the country | 10. ☐ |
| 11. Interesting work | 11. ☐ |
| 12. Prestige in the community | 12. ☐ |

41. To what \$ level do you have the authority to approve and sign procurement directives?

Check one

- | | |
|-----------------------|-----------------------------|
| 1. Up to \$250 | 1. ☐ |
| 2. \$251-1000 | 2. ☐ |
| 3. \$1001-2500 | 3. ☐ |
| 4. \$2501-5000 | 4. ☐ |
| 5. \$5001-10,000 | 5. ☐ |
| 6. \$10,001-25,000 | 6. ☐ |
| 7. \$25,001 and above | 7. ☐ |

42. What special problems characterize the items you manage?

Check as many
as apply

- | | |
|---|------------------------------|
| 01. Restricted shelf life | 01. ☐ |
| 02. Necessity to requisition car lot quantities | 02. ☐ |
| 03. Perishability | 03. ☐ |
| 04. Repair or overhaul cycles | 04. ☐ |
| 05. Sized items (for example, clothing) | 05. ☐ |
| 06. Special packaging or handling | 06. ☐ |
| 07. Seasonal trends | 07. ☐ |
| 08. High demand; fast-moving | 08. ☐ |
| 09. Erratic demand patterns (unstable demand) | 09. ☐ |
| 10. Unusually long or short procurement cycles | 10. ☐ |
| 11. Quality control | 11. ☐ |
| 12. Retrofit (design change requiring modification of existing equipment) | 12. ☐ |
| 13. Special program requirements (not in demand forecast) | 13. ☐ |
| 14. Obsolescence | 14. ☐ |
| 15. Other (Specify: <u> </u>) | 15. ☐ |

PRESENT DUTIES AND RESPONSIBILITIES:

The rest of the questionnaire consists of a list of duties and responsibilities commonly associated with inventory management. Consider each statement in relation to your own assigned duties and responsibilities. Write on the line before each statement the number from the following code which most nearly applies:

- ☐ 5 Significant part of my job every day
- ☐ 4 Substantial part of my job, at least several times a week
- ☐ 3 Part of my job, probably once a week or twice a month
- ☐ 2 Part of my job, but seldom have to do this, perhaps every month or at some regular time of year
- ☐ 1 Not a regularly assigned responsibility, but I sometimes do this
- ☐ 0 Definitely not part of my job; does not apply

- ☐ 1. Make up procurement requisition when stocks need replenishing
- ☐ 2. Authorize purchase of additional quantity of materiel over amount normally used
- ☐ 3. Work with procurement in cancelling contracts
- ☐ 4. Make recommendations for substitution of items
- ☐ 5. Refer to Federal Catalog to make preliminary check for substitutions
- ☐ 6. Decide whether to order new item or modify already existing one
- ☐ 7. Institute emergency procedures to fill customer's requisitions
- ☐ 8. Terminate purchase requests
- ☐ 9. Make manual buy for urgent request
- ☐ 10. Check to see if reasons given for computer kicking out requisitions are valid
- ☐ 11. Review demand trends and patterns and special program requirements to adjust mechanically produced procurement requests
- ☐ 12. Extend availability dates for new items
- ☐ 13. Process field-generated supply requests requiring action other than repair or expediting
- ☐ 14. Scrub item records on automatic data processing equipment
- ☐ 15. Maintain computer-generated item records
- ☐ 16. Provide Government Furnished Equipment or Property to prime manufacturers for new production

- ☐ 5 Significant part of my job every day
 - ☐ 4 Substantial part of my job, at least several times a week
 - ☐ 3 Part of my job, probably once a week or twice a month
 - ☐ 2 Part of my job, but seldom have to do this, perhaps every month or at some regular time of year
 - ☐ 1 Not a regularly assigned responsibility, but I sometimes do this
 - ☐ 0 Definitely not part of my job; does not apply
-

- ☐ 17. Anticipate new and changed demands for items and revise demand forecast
- ☐ 18. Make up manual supply control study
- ☐ 19. Forecast the volume of orders to be filled in the near future
- ☐ 20. Establish inventory levels, taking into account maintenance and repair cycles
- ☐ 21. Resolve problems of deliveries that are difficult to meet
- ☐ 22. Accelerate or delay deliveries
- ☐ 23. Request daily transaction record from computer
- ☐ 24. Compute demand requirements by hand
- ☐ 25. Compute demand requirements by calculator
- ☐ 26. Compute demand requirements by desk computer
- ☐ 27. Use mathematical formulas to figure net assets
- ☐ 28. Use mathematical formulas to figure projected needs for next year
- ☐ 29. Use mathematical formulas to decide when to buy
- ☐ 30. Check computations of machine figures
- ☐ 31. Analyze recurring demands and issues to establish average monthly rates that indicate any future increases or decreases
- ☐ 32. Use exponential smoothing techniques and trend analyses to forecast material requirements
- ☐ 33. Handle problems due to frequent fluctuation in issue experience data and requirements
- ☐ 34. Periodically review items managed and adjust forecast
- ☐ 35. Recommend changes in maximum release quantities for requisitioners
- ☐ 36. Make manual adjustment if forecast demands not recorded correctly
- ☐ 37. Check out high demand to see if error, liable to recur, or nonrecurring

- ___ 38. Decide to buy even if not in buy position
- ___ 39. Figure demand on seasonal trend basis
- ___ 40. Make corrections to inventory records, demand forecasts, etc. as indicated by supervisor or group leader
- ___ 41. Indicate corrections to be made by another person
- ___ 42. Request a supply control study
- ___ 43. Establish demand forecasts for new items
- ___ 44. Check stock status report to see if information is current
- ___ 45. Suggest improvements to inventory management systems
- ___ 46. Serve as a member of one or more committees concerned with company policy
- ___ 47. Participate with item managers and/or section chief in review board meetings relative to various programs and studies
- ___ 48. Perform technical requirements analysis for determining and programming long-range plans
- ___ 49. Visit military bases, naval ships, supply depots
- ___ 50. Visit contractors to discuss items managed
- ___ 51. Visit foreign countries in connection with items managed
- ___ 52. Attend meetings at Contractor's plant
- ___ 53. Attend meetings at a government agency such as BuAer, BuShips, BuWeapons, GSA
- ___ 54. Attend meetings at own installation with outside personnel present (budget representatives, Contractor's representatives, Customer's rep's., etc.)
- ___ 55. Supervise other personnel
- ___ 56. Attend training program at another installation (of own or of another agency) on implementation of new policies and procedures
- ___ 57. Attend other types of training programs not at own installation
- ___ 58. Attend training sessions on new procedures, use of new forms, etc. at own installation
- ___ 59. Write instructions to lower grade employees about items they will be expected to manage
- ___ 60. Furnish guidance to other item managers relative to specific procedures and instructions introduced into the inventory management system
- ___ 61. Act as a consultant or advisor on some aspect of inventory management but not in own installation
- ___ 62. Teach some aspect of inventory management as part of on-the-job training of lower grade personnel

- ☐ 5 Significant part of my job every day
 - ☐ 4 Substantial part of my job, at least several times a week
 - ☐ 3 Part of my job, probably once a week or twice a month
 - ☐ 2 Part of my job, but seldom have to do this, perhaps every month or at some regular time of year
 - ☐ 1 Not a regularly assigned responsibility, but I sometimes do this
 - ☐ 0 Definitely not part of my job; does not apply
-

- ___ 63. Plan and schedule own work on assigned projects
- ___ 64. Analyze data processed by a computer
- ___ 65. Keep informed of revisions in specifications
- ___ 66. Determine which of two or more sources of information is more reliable according to information provided
- ___ 67. Request expediting action to assure on-time delivery of item
- ___ 68. Arrange for re-purchases from another branch of the military
- ___ 69. Determine which items are unissuable or obsolete
- ___ 70. Request deletion of non-standard or obsolete items from Federal Catalog
- ___ 71. Delay decataloging of discontinued item until stock has been used up
- ___ 72. Decide on best method of packaging (packing) for transporting or storing items
- ___ 73. Decide about repairs - when, how much, etc.
- ___ 74. On newly standardized items, decide if need to validate initial requirements from the services
- ___ 75. Study mobilization requirements data and recommend changes
- ___ 76. Decide whether to order more materiel to keep safe level needed for mobilization reserve
- ___ 77. Initiate procurement directives to keep stocks at a safe level so that they are always available when needed
- ___ 78. Develop requirements for both peace and mobilization
- ___ 79. Call contracting officer about contract requirements or modifications
- ___ 80. Decide what to do about items customer would like to return
- ___ 81. Use price adjustments or other means to clear buildup of stock, or outdated stock

- ___ 82. Check with other departments, customers or agencies to find uses for excesses
- ___ 83. Arrange for sale or disposal of excess or obsolete supplies
- ___ 84. Make up report of disposal of excess stock
- ___ 85. Arrange for disposal of surplus contractor inventory
- ___ 86. Handle and review disposal actions
- ___ 87. Work with procurement in deciding how to dispose of surplus materiel
- ___ 88. Review excess property reports and prepare disposition instructions for depots
- ___ 89. Determine world-wide retention requirements for items managed
- ___ 90. Review and analyze reports, records and other supply documents to determine the quantities that can be procured most economically
- ___ 91. Authorize the procurement of spare parts from different supply or manufacturing sources
- ___ 92. Calculate weights to determine if more economical to ship distances or buy directly from Contractor's plant
- ___ 93. Check inventory records to see which items are not moving
- ___ 94. Check inventory records to determine which items should be deleted or reclassified
- ___ 95. Check inventory records to see if new items should be added
- ___ 96. Check for differences in monthly activity (unexpected demand - drop in demand)
- ___ 97. Check inventory records to determine what has to be ordered
- ___ 98. Check inventory records to determine location of stock
- ___ 99. Check inventory records to determine number of back orders
- ___ 100. Check inventory records to determine quantity of stock due in
- ___ 101. Check inventory records to determine quantity of stock currently being overhauled, retrofitted, repaired, etc.
- ___ 102. Check to determine if procurement lead time review is valid
- ___ 103. Insure that sufficient stock is available in all depots to meet forecasted needs
- ___ 104. Arrange for transfer of stock from one depot to another
- ___ 105. Decide on mode of transportation from vendor to depot or from depot to customer
- ___ 106. Coordinate and direct distribution of stock from manufacturing or storage depots, issue points, or using activities

- ☐ 5 Significant part of my job every day
 - ☐ 4 Substantial part of my job, at least several times a week
 - ☐ 3 Part of my job, probably once a week or twice a month
 - ☐ 2 Part of my job, but seldom have to do this, perhaps every month or at some regular time of year
 - ☐ 1 Not a regularly assigned responsibility, but I sometimes do this
 - ☐ 0 Definitely not part of my job; does not apply
-

- ___ 107. Decide whether to ship an item directly to a customer or put into stock
- ___ 108. Decide whether or not to authorize Direct Vendor Delivery
- ___ 109. Determine that stocks are not being received earlier than needed
- ___ 110. Act as liaison with vendor, depot, customer
- ___ 111. Answer customers' telephoned or written questions about documents, back orders, etc.
- ___ 112. Write query or telephone customer if demand seems too high
- ___ 113. Write letters to vendors, customers, or others outside your installation or agency
- ___ 114. Contact vendors to keep abreast of potential new items or modifications of items currently in use
- ___ 115. Check with depot to see if stock has arrived
- ___ 116. Follow up progress on repairs or overhauls
- ___ 117. Contact quality control representative at storage depot
- ___ 118. Maintain liaison with buyers
- ___ 119. Act as liaison with technical operations
- ___ 120. Request technical operations to change records to reflect superseded items, modifications to existing items, acquisition of new item types
- ___ 121. Deal with people in catalog department
- ___ 122. Deal with people in inventory accounting department
- ___ 123. Ask technical operations person to recommend or approve a substitute item
- ___ 124. Ask technical operations to furnish descriptions of items difficult to procure
- ___ 125. Initiate and reply to internal memoranda
- ___ 126. Contact DCAS representative to facilitate expediting, register complaint about defective materiel, etc.

- ___ 127. Check on delivery schedules
- ___ 128. Check on wording of contracts
- ___ 129. Make phone calls to vendors on technical problems (other than "Where is materiel?")
- ___ 130. Process unsatisfactory materiel reports from field
- ___ 131. Initiate disposition instructions for unsatisfactory materiel
- ___ 132. Call storage depots and attempt to recoup disposed materiel
- ___ 133. Research catalogs and technical manuals
- ___ 134. Request cataloging branch to assign Federal Stock Numbers to items and place in FSN Catalog
- ___ 135. Recommend deviations from military specifications
- ___ 136. Check to see if item needs FSN or has correct FSN
- ___ 137. Initiate action to change type classification in Federal Catalog
- ___ 138. Modify interchangeability data on assigned items
- ___ 139. Make recommendations to revise specifications on assigned items
- ___ 140. Monitor depot surveillance for spoilage (rust, mildew, etc.)
- ___ 141. Check shipping reports for discrepancies
- ___ 142. Check control files to determine if/when purchase requests have been put through, purchase order numbers assigned, materiel received
- ___ 143. Account for loss of government property
- ___ 144. Request inventory branch to call depot and check on inventory loss
- ___ 145. Track down lost materiel (ask for investigation if item disappears from inventory and requisitions do not show use, etc.)
- ___ 146. Request warehouse count to verify stock records
- ___ 147. Check out shipping and receiving data - discrepancies on shipping orders; invoices
- ___ 148. Handle complaints from storage depots - for example, materiel received without contract number or FSN, packaging discrepancy
- ___ 149. Compile report of back order status
- ___ 150. If no stock available, search out items by canvassing likely warehouses, supply depots, etc.
- ___ 151. Authorize back order so that some stock can be held in reserve for emergencies

- ☐ 5 Significant part of my job every day
 - ☐ 4 Substantial part of my job, at least several times a week
 - ☐ 3 Part of my job, probably once a week or twice a month
 - ☐ 2 Part of my job, but seldom have to do this, perhaps every month or at some regular time of year
 - ☐ 1 Not a regularly assigned responsibility, but I sometimes do this
 - ☐ 0 Definitely not part of my job; does not apply
-

- ___ 152. Request emergency warehouse count
- ___ 153. Present request for authorization to purchase to a briefing panel, including a ranking military officer, such as a general or an admiral
- ___ 154. Prepare report for briefing panel, but someone else presents
- ___ 155. Justify capital expenditures
- ___ 156. Review budgets
- ___ 157. Explain divergence between budget and actual expenditures
- ___ 158. Suggest redesign of item or substitution of another item to reduce costs
- ___ 159. Make recommendations for termination settlements
- ___ 160. Decide whether to spend more money and get faster delivery or settle for less expensive item, slower delivery
- ___ 161. Consider cost to hold versus cost to dispose of and make recommendations for retention or deletion of item
- ___ 162. Equate administrative cost to buy with administrative cost to hold at depot, and take appropriate action
- ___ 163. Prepare proposed budget for items managed for audit committee's examination
- ___ 164. Make substitutions or adjustments to requirements due to austere funding or reduction of maintenance level of stock due to budget cuts
- ___ 165. Decide whether or not to pay premium price for an item
- ___ 166. Decide to decapitalize pre-positioned mobilization reserve stocks
- ___ 167. Analyze information received on a teletype
- ___ 168. Send queries or messages on teletype or other automatic communicator
- ___ 169. Fill out standard forms or reports
- ___ 170. Submit report of the amount of work you have completed in a given period

- ___ 171. Submit backlog report (work uncompleted)
- ___ 172. Submit back order status report
- ___ 173. Maintain personnel records for members of work group
- ___ 174. Keep time records for members of work group
- ___ 175. Maintain records and/or files of work flow, output of employees, work schedules, quotas, or other figures used in measuring performance
- ___ 176. Assign jobs to others at a lower GS level
- ___ 177. Submit regular reports concerning accomplishment of groups of employees
- ___ 178. Sign time cards
- ___ 179. Sign interoffice memos
- ___ 180. Sign messages or memoranda to higher GS levels or ranking military officers
- ___ 181. Institute amendments to purchase orders
- ___ 182. Increase or decrease quantity specified on original purchase order
- ___ 183. Cancel purchase orders
- ___ 184. Process materiel release orders

If there are tasks which you perform regularly that are not included in this list, please list and describe them below:

- ___ 185.
- ___ 186.
- ___ 187.

PR-71-23

Appendix D

- D-1 IMS Work Sample - Background and Instructions
- D-2 Chart Showing the New Inventory Manager as the
Hub of a Pattern of Interaction Within and
Without USARDA
- D-3 Selected Pages from the Monthly Inventory
Status Report (ISR)
- D-4 Sample Problems
- D-5 Work Sample Action Form

Appendix D-1

IMS WORK SAMPLE

BACKGROUND AND INSTRUCTIONS

Background

In this exercise, you are asked to assume the role of LEE MATTEL, an Inventory Management Specialist, who has about the same education and experience that you have. You have just accepted an appointment to a new government agency, USARDA (U. S. Aerospace Research and Development Administration), with headquarters at the NASA complex in Houston, Texas. This new agency was created July 1, 1972 as part of a multi-national program of scientific experiment and investigation oriented toward the peaceful uses of outer space. Countries presently signers of an international agreement to support this program are Canada, England, Japan, France, and Russia, with others expected to join. The international organization is United Nations Aeronautics and Space Exploration Agency (UNASEA).

USARDA has at present two space stations. SS-1 was launched in early 1973 into a polar orbit (90° to the equator), which will allow coverage of the entire surface of the earth, including the polar icecaps. SS-2 was launched in late 1973, and is now in a docking orbit at 310 miles. Each has specific missions, including not only scientific experiments but also launching and servicing of manned and unmanned spacecraft for further exploration of outer space. The complement of SS-1 is 10; of SS-2, 15. A lunar laboratory, with an eventual complement of 25, is expected to be operational early in 1975.

The items you are to manage as Lee Mattel are all concerned with life support of the crews of space stations and manned spacecraft, and involve mostly consumable items. In addition, you manage spare parts for the environmental and waste disposal systems, and some items with a repair cycle. You initiate manifests of items that provide a replacement of certain consumable items on a regular schedule, with other items obtained and added to the manifest as needed. The need for spare parts and repairs has been low because of the short time the stations have been in space, but it is necessary to be able to provide these items on short notice. The manifests of regularly consumed items may be varied only by specific request, at least 30 days in advance of shipment, but also depending on procurement lead time.

One problem in providing support for space stations and spacecraft is that shipments must be assembled at the Space Transportation

Appendix D-1

-2-

System staging area (Dry Lake, California) on a strict schedule, because only certain flights are allotted to men and supplies. At present, these flights are on a 28-day cycle, with alternate flights to each space station every fourteen days. Another problem is that weight and volume are carefully apportioned, and must be kept within certain limits. It is not your responsibility to control this aspect of shipments, however, except to furnish the necessary information about your items. Packaging must also be uniform, so that the items can be stowed in their proper modules for transportation and later dispensing.

Space transportation vehicles consist of tandem aerospace planes with rocket and jet engines and wings on each of two stages. The reusable booster stage detaches and returns to earth empty, while the orbiter remains docked at the space station to serve as a storeroom for supplies. When the new shipment is launched, the docked orbiter detaches and brings back unused stores, crew members, scientific gear, specimens, disabled satellites, repairable equipment, etc. (Such a vehicle can carry 25 tons of cargo--or 7 1/2 to 10 tons of cargo and 10 passengers with their gear. The booster is about the size of a Boeing 747, and the orbiter about the size of a Boeing 707.) Unused, unopened stores of some types brought back from the space station are returned to stock, others with shelf life conditions are destroyed, and partial packs of reusable material are sent to property disposal. Your inventory will be affected only by the items returned to stock.

Instructions

Today is Monday, January 15, 1974, your first day at Lee Mattel's desk. You have been introduced to your superiors in the division and to your immediate supervisor, ROBERT HERRERA, in charge of Commodity Branch A. You are taking over Section A1. Mr. Herrera has gone to a meeting and will not be available for consultation during this work period. You may plan, however, to consult him later if you find you cannot take action on a problem independently.

In accepting the appointment to this new agency, you were told that the Department of Defense MILSTRIP (Military Standard Requisitioning and Issue Procedure) system of inventory management, with which you have had experience, is being used. While many of the items are unique to the support of the space program, some were developed for military use and may

Appendix D-1

-3-

be obtained by USARDA as a customer through inventory managers in Defense Supply installations and military services, using Federal Stock Numbers (FSN). Your items all carry FSNs. Military services and participating countries in turn may requisition USARDA items as your customers, which you will furnish if available in stock or in property disposal.

The space stations communicate by voice and by computer with the control center in Houston, which then relays messages to those concerned. There is no tie-in as yet of the computers in the space stations or control center with the central computer in USARDA on which the inventory records are kept. All requisitions or transactions affecting any of your items are routed through you for manual handling, so that you will be aware at all times of current status.

Your forecasts of requirements are based on demand history of manifest items translated by formula into annual terms, with a factor included for other demands based on past usage or known future plans. Blanket requisitions are in effect with defense supply agencies such as Defense Personnel Support Center (DPSC), which furnishes many of your consumable items, for periodic replenishment of stock. Of the items not regularly issued, some are stocked and some are procured as needed. These items must be carefully watched so that reorders are initiated within procurement lead time.

In Envelope A you will find reference material and supplies you need for your work. When we have finished going through these instructions, you will have some time to go through this material. Look for:

- ... List of people you may need to deal with inside and outside USARDA. USARDA Organization Charts are attached.
- ... List of the items you will be managing, by FSN number order and alphabetic order. Names of usual vendors are included.
- ... Flight schedule for 1973 and 1974. Calendars for 1973, 1974, and Julian dates are on the reverse side.
- ... Procedures and Codes.
- ... Position Description. (All USARDA inventory managers are in the same grade as you are at present.)
- ... Blank forms.

Purchase Requests
USARDA Disposition Forms
Manifest Forms
Joint Messageforms
USARDA Routing Slips

Appendix D-1

-4-

... Tablet for scratch paper, pencils, paper clips.

In Envelope B, you will find an accumulation of work, some partly finished or annotated, including your latest set of quarterly inventory status reports. You will note that some problems are urgent, and others may be worked on if you have time. You will have to use your own judgment as to what needs to be done first. (You will also receive several messages or requests during the work period, which may or may not be related to the work in progress.) Mr. Herrera told you that the work in Section A1 had piled up somewhat because the former manager, IRWIN MILLER, had to leave on short notice a week ago.

You will have three hours to do as much work as you can on the work in Envelope B. Approach your work in the same manner as if you were actually LEE MATTEL, and handle your problems by asking for information, answering inquiries, initiating procurements, reviewing and annotating your inventory status reports and manifests, and taking any other action necessary to carry out your inventory management function. Remember that everything you do or plan to do must be in writing, including content of telephone calls or planned discussion with others. (Do not assume what the content of the replies is.) Even though you may not be able to resolve some problems, you may be able to take steps toward solving them or make plans for taking action at a later time.

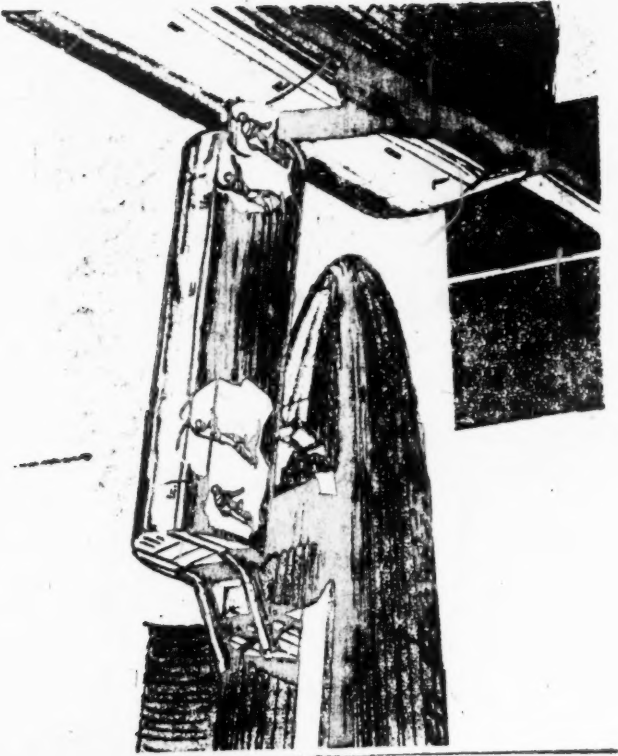
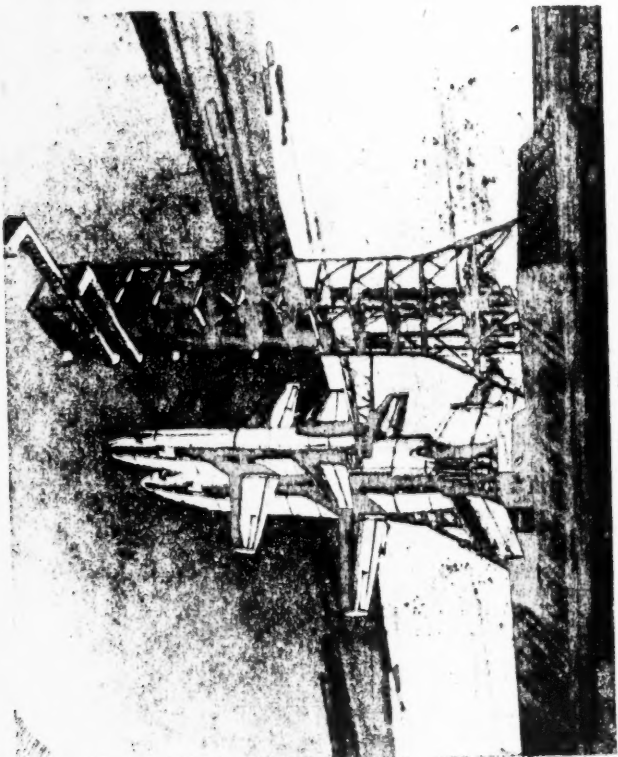
Now take about 15 minutes to look through the material in Envelope A, and then open Envelope B and proceed with your work.

Since you are new to the job, Mr. Herrera has asked you to route all work through him by assembling it in Envelope B at the end of the work period. All unused materials should be put in Envelope A and the two envelopes rubber-banded together.

REMEMBER, today is Monday, January 15, 1974 (Julian date 74015). You are LEE MATTEL. Please begin by looking through the materials in Envelope A.

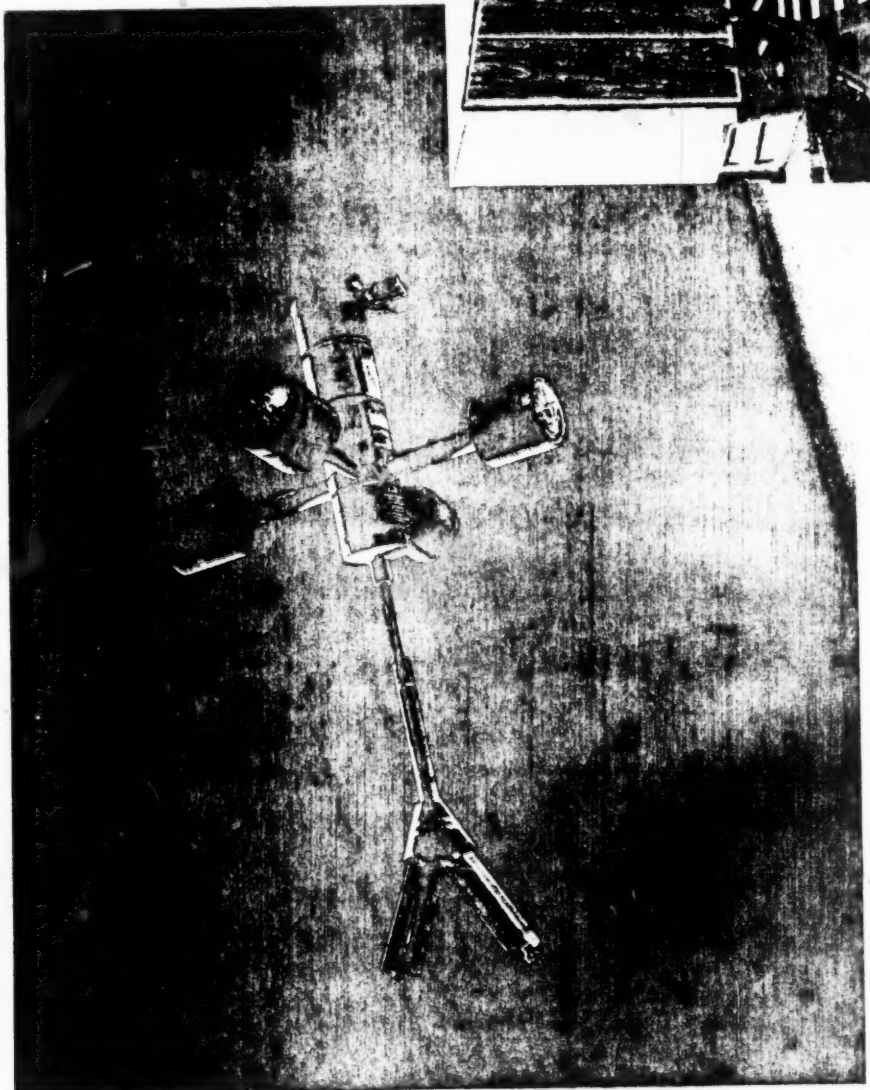
Your IMS code is XYSA1. Welcome to USARDA!

SPACE SHUTTLE



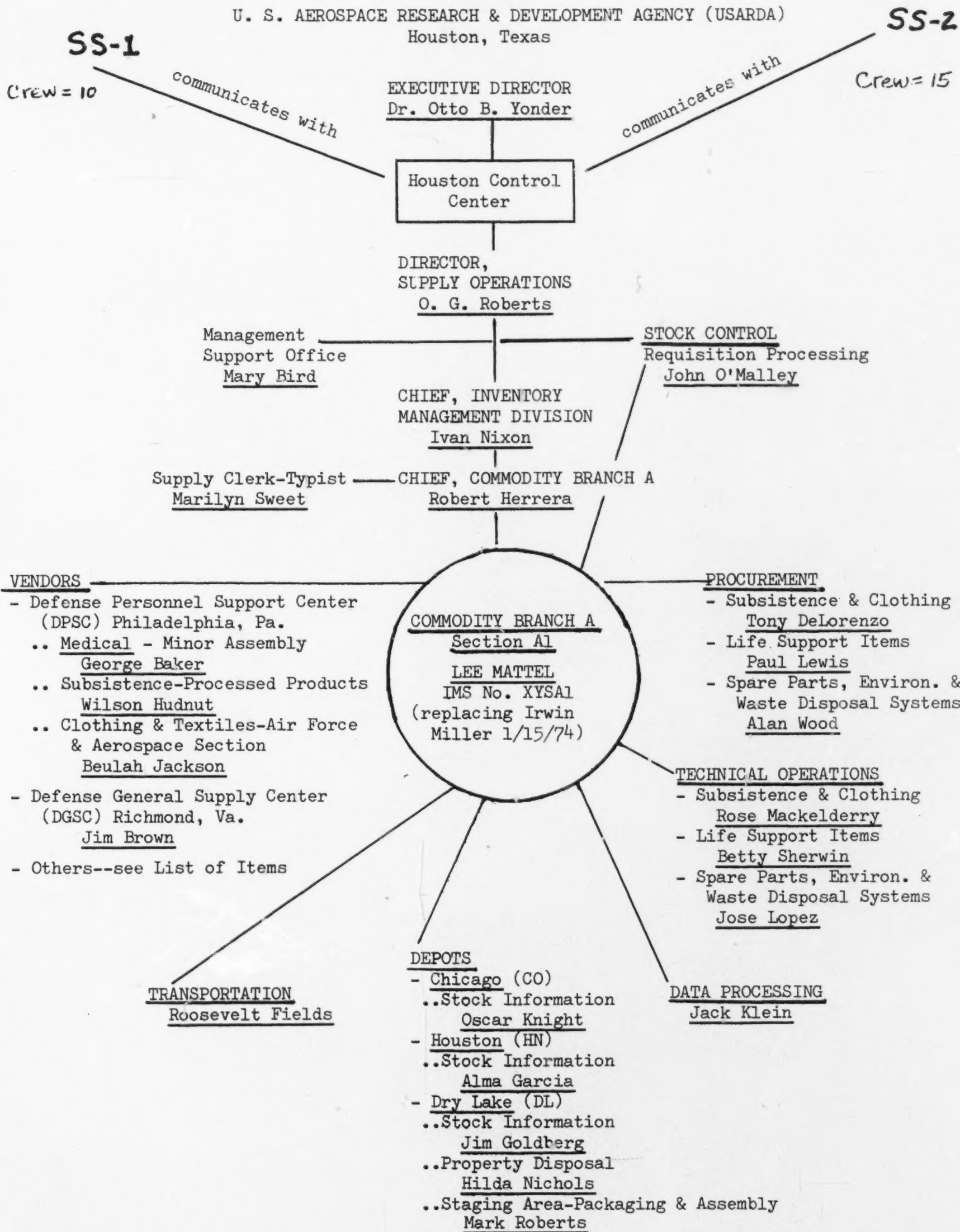
SPACE STATION

Artist's sketch of orbiting Space Station (l.) shows four living-working modules at end of spokes that rotate to create artificial gravity. The 150-foot telescoping boom separates manned area from nuclear power sources. Below and right, sketches of control room, living quarters.



Appendix D-2

U. S. AEROSPACE RESEARCH & DEVELOPMENT AGENCY (USARDA)
Houston, Texas



Appendix D-3

USARDA INVENTORY STATUS REPORT

FSN 1870-670-9796

REPORT DATE 73365

NOUN BLADES/SS HYDRO JOHN

UNIT OF ISSUE 1

CLASS OF ITEM E

UNIT PRICE 2.40

IMS CODE XYSAL

UNIT WEIGHT .5 LB

PROCUREMENT CODE AD

UNIT CUBE 120

BUDGET OR FUND CODE XY

SHELF LIFE

PROCUREMENT LEAD TIME MONTHS

	ADM	PRD	DEL	TOT	REORDER LEVEL
MO	1.5	3	.5	5	NO UNITS 2

INVENTORY CONTROL POINTS

	ON HAND	DUE IN	BACK ORDERED	SAFETY LEVEL	REPAIR CYCLE
DRY LAKE DL					
HOUSTON HN	5				
CHICAGO CO					
TOT	5				

DEMAND HISTORY QUARTERLY

CURR	1ST PREV	2ND PREV	3RD PREV	4TH PREV
Q				

SPACE STATIONS SS

1

MILITARY MI

OTHER OR

TOT

1

DEMAND FORECAST

1ST 4Q	2ND 4Q	TOT
4	8	12

IMS NOTES

FSN 1870-670-9796

NOUN BLADES/SS HYDROJOHN

Appendix D-3

USARDA INVENTORY STATUS REPORT

FSN 6505-847-4045

REPORT DATE 73365

NOUN PRESCRIP DRUG KIT

UNIT OF ISSUE 1

CLASS OF ITEM C

UNIT PRICE 40.00

IMS CODE XYSA1

UNIT WEIGHT 5 LB

PROCUREMENT CODE BC

UNIT CUBE 120

BUDGET OR FUND CODE XY

SHELF LIFE 90

PROCUREMENT LEAD TIME MONTHS

	ADM	PROD	DEL	TOT	REORDER LEVEL
MO	.5	2	.5	3	NO UNITS 9

INVENTORY CONTROL POINTS

	ON HAND	DUE IN	BACK ORDERED	SAFETY LEVEL	REPAIR CYCLE
DRY LAKE OL	9	9		3	
HOUSTON HN					
CHICAGO CO					
TOT	9	9			

DEMAND HISTORY QUARTERLY

	CURR Q	1ST PREV	2ND PREV	3RD PREV	4TH PREV
SPACE STATIONS SS	8	4	3	3	3
MILITARY MI					
OTHER OR					
TOT	8	4	3	3	3

DEMAND FORECAST

	1ST 4Q	2ND 4Q	TOT
	34	68	102

IMS NOTES MANIFEST ITEM

FSN 6505-847-4045

NOUN PRESCRIP DRUG KIT

Appendix D-3

USARDA INVENTORY STATUS REPORT

FSN 8475-226-0417

REPORT DATE 73365

NOUN COVERALL WH MED COMP

UNIT OF ISSUE DZ

CLASS OF ITEM B

UNIT PRICE 48.00

IMS CODE XYSAL

UNIT WEIGHT 10 LB

PROCUREMENT CODE BC

UNIT CUBE 960

BUDGET OR FUND CODE XY

SHELF LIFE

PROCUREMENT LEAD TIME MONTHS

ADM PROD DEL TOT REORDER LEVEL

MO .5 2 .5 3 NO UNITS 90

INVENTORY CONTROL POINTS

ON
HANDDUE
INBACK
ORDEREDSAFETY
LEVELREPAIR
CYCLE

DRY LAKE DL
HOUSTON HN
CHICAGO CO

30

60

180

30

TOT

90

180

DEMAND HISTORY QUARTERLY

CURR
Q1ST
PREV2ND
PREV3RD
PREV4TH
PREV

SPACE STATIONS SS

90

48

36

40

40

MILITARY MI

12

12

OTHER OR

TOT

102

60

36

40

40

DEMAND FORECAST

1ST 4Q 2ND 4Q TOT

428

856

1284

IMS NOTES MANIFEST ITEM

FSN 8475-226-0417

NOUN COVERALL WH MED COMP

Appendix D-3

USARDA INVENTORY STATUS REPORT

FSN 8940-333-5951

REPORT DATE 73365

NOUN POULTRY W/VEG FR DR

UNIT OF ISSUE LB

CLASS OF ITEM A

UNIT PRICE 1.85

IMS CODE XYSAL

UNIT WEIGHT 1 LB

PROCUREMENT CODE BC

UNIT CUBE 30

BUDGET OR FUND CODE XY

SHELF LIFE

PROCUREMENT LEAD TIME MONTHS

	ADM	PROD	DEL	TOT	REORDER LEVEL
MO	.5	2	.5	3	NO UNITS 30

INVENTORY CONTROL POINTS

	ON HAND	DUE IN	BACK ORDERED	SAFETY LEVEL	REPAIR CYCLE
DRY LAKE DL	30				
HOUSTON HN					
CHICAGO CO	60	90		30	
TOT	90	90			

DEMAND HISTORY QUARTERLY

	CURR Q	1ST PREV	2ND PREV	3RD PREV	4TH PREV
SPACE STATIONS SS	30	16	12	12	12
MILITARY MI					
OTHER OR					
TOT	30	16	12	12	12

DEMAND FORECAST

	1ST 4Q	2ND 4Q	TOT
	126	252	378

IMS NOTES MANIFEST ITEM

FSN 8940-333-5951

NOUN POULTRY W/VEG FR DR

Appendix D-4

Disposal Code: A Return to stock for reissue, add to inventory
 B Unused units of issue, shelf life items, to property disposal duration of shelf life or sale
 C Unused partial units of issue, available to non-space station customers from property disposal
 D To repair cycle
 H Destroy

Copies to:
 Dry Lake
 Data Processing
 Acctg
 File (2)

pp. 1 of 3

Post returns. Send disposal auth.
 f/u notes: No time/ Miller
 SHIPPING MANIFEST (D7A)

Flight No. 16
 Date of Flight 12/2/73
 Destination 55-2

MILSTRIP D7A/ØDL/S/ cc 8-22

FSN Noun

cc 23-24
 Unit Issue Unit Weight Unit Cube

cc 25-29 ØXYRDA/3329/ØØ16/R/BLNK/C/XV/BL/552/AA/336
 Quant. Issue Quant. Weight Volume

Return Inventory
 Disposal 1/6/74
 Code Number
 cc 71

1860-593-9718	Panel/Solarcell Repl	DZ	24	LB	7680	2	48	15	360	A	1
6505-332-9425	Nonprescrip Drug Kit	1	8	LB	240	2	16	480	B	1	
6505-847-4045	Prescription Drug Kit	1	5	LB	120	2	10	240	H	partial	
6515-024-3020	Surgical Kit	1	15	LB	1920	1	15	1920	B	1	
6545-008-6175	First Aid Kit	1	2	LB	60	2	4	120	A	1	
6840-752-2346	Germicidal Concentr	2#	2	LB	960	2	4	1920	H	partial	
7350-500-6740	Cups Paper H/C 8 oz	GR	10	LB	240	9	90	2160	A	1	
8415-916-6394	Long John Wh Med Comp	DZ	5	LB	960	36	180	34560	C	6	
8430-705-5927	Boot Wh Str	DZ	6	LB	480	18	108	8640	C	6	
8465-820-2877	Liner-Sleeping Bag Repl	DZ	5	LB	720	18	90	12960	A	3	
8475-226-0417	Coverall Wh Med Comp	DZ	10	LB	960	18	180	17280	A	2	
8530-318-6835	Grooming Kit	1	2	LB	60	15	30	900	H	partial	
8540-087-5336	Towelettes-Premoiist	GR	14	LB	1920	9	126	17280	H	partial	
8540-941-9084	Towel 20x40 Viva	GR	40	LB	7680	3	120	23040			
8905-564-4187	Corned Beef Hash Dr	LB	1	LB	30	3	3	90	A	3	
8905-691-8337	Irish Squares Dehyd	LB	1	LB	30	3	3	90	H	partial	
8905-792-5197	Beef Fresh Irrad	5#	5	LB	240	6	30	1440	H	partial	
8905-879-8184	Bacos Pkts	GR	6	LB	60	3	18	180	B	1	
8910-037-0173	Milk Powd/Choc Pkts	5#	5	LB	480	3	15	1440	H	partial	
8910-295-6995	Inst Breakfast/Van	5#	5	LB	480	3	15	1440	A	1	
8910-549-2148	Milk Pwd/Wh Pkts	5#	5	LB	480	8	40	3840	A	2	
8910-845-7799	Eggs, Dried	5#	5	LB	480	3	15	1440	A	1	

Appendix D-4

Disposal Code: A Return to stock for reissue, add to inventory
 B Unused units of issue, shelf life items, to property disposal duration of shelf life or sale
 C Unused partial units of issue, available to non-space station customers from property disposal
 F To repair cycle
 H Destroy

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 Dry Lake
 Data Processing
 Acctg
 File (2)

MILSTRIP D7A/DDL/S/ cc 8-22

SHIPPING MANIFEST (D7A)

Flight No. 16
 Date of Flight 12/2/73
 Destination 55-2

cc 23-24
 Unit Issue Unit Weight Unit Cube
 cc 25-29 ØXYRDA/3329/ØØ16/R/BLNK/C/XV/BL/552/AA/Ø36
 Quant. Issue Quant. Weight Quant. Volume
 Return Inventory
 Disposal 1/6/74
 Code Number
 cc 71

8910-857-2926	Inst Breakfast/Straw	5#	5 LB	480	3	15	1440		
8910-936-6220	Inst Breakfast/Choc	5#	5 LB	480	3	15	1440		
8915-029-7881	Fruit Compote/Dr Pkt	5#	5 LB	480	3	15	1440		
8915-226-8169	Fruit Drink Powd/Asst	GR	6 LB	240	6	36	1440		
8915-582-4330	Veg Dehyd Pkt Asst	DZ	2.5 LB	240	3	8	720	A	1
8915-976-2677	Potato Flakes Dr	LB	1 LB	30	6	6	180	H	partial
8920-078-4958	Crackers/Pkt Asst	GR	3 LB	240	6	48	1440		
8920-480-7059	Cookies Pkt Asst	GR	7 LB	120	6	42	720		
8920-732-5186	Cereal/Dr Pkg Asst	DZ	2.5 LB	240	5	13	1440	A	1
8920-899-0188	Toast/Melba Pkts	GR	7 LB	120	6	42	720		
8925-372-0815	Sugar Pkts	GR	6 LB	60	9	54	540	A	partial
8935-052-3238	Soup Dehyd/Pkt Asst	GR	6 LB	240	3	18	720		
8940-190-4009	Lamb w/Veg Fr Dr	LB	1 LB	30	6	6	180	A	1
8940-298-2559	Beef w/Veg Fr Dr	LB	1 LB	30	9	9	270		
8940-307-0784	Nondairy Cream Pkts	GR	6 LB	60	9	54	540	A	1
8940-333-5951	Poultry w/Veg Fr Dr	LB	1 LB	30	6	6	180	H	partial
8940-544-7203	Veal w/Veg Fr Dr	LB	1 LB	30	6	6	180	A	partial
8940-920-1672	Pudding Mix Pkt Asst	GR	8 LB	240	6	48	1440		
8950-278-9407	Condiments Pkt Asst	GR	4 LB	60	3	12	180	H	partial
8950-700-3813	Salt/Pepper Pkts	GR	6 LB	60	9	54	540	A	1
8955-270-0065	Coffee Dr Dr Pkts	GR	6 LB	60	6	54	540		
8955-629-3317	Tea Instant/Pkts	GR	6 LB	60	5	30	300	A	1

Appendix D-4

Disposal Code: A Return to stock for reissue, add to inventory
 B Unused units of issue, shelf life items, to property disposal duration of shelf life or sale
 C Unused partial units of issue, available to non-space station customers from property disposal
 F To repair cycle
 H Destroy

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 Acctg
 File (2)

pp. 2 of 3

SHIPPING MANIFEST (D7A)

Flight No. 16
 Date of Flight 12/2/73
 Destination SS-2

MILSTRIP D7A/DDL/S/ cc 8-22

FSN Noun

cc 23-24
 Unit Issue

Unit Weight

Unit Cube

cc 25-29
 Quant. Issue

Quant. Weight

Quant. Volume

Return Inventory
 Disposal
 Code
 cc 71
 Number

8970-119-8480 Food Sticks Caramel

DZ

.25 LB

20

9

3

180

A

1

8970-434-9503 Food Stocks Choc

DZ

.25 LB

20

27

7

340

1860-931-8687 Silica Gel Bed Repl.

4

8 LB

7680

1

8

7680

Net. 1769 171810

Notes from SS-2 Steward Flight 16

1. Send more Fruit Drink Powd. Used supply in 20 days
2. Note return of corned beef hash. Nobody liked.
3. Used only half fresh beef-peculiar odor when cooked. Check with tech ops
4. 6 gross only of coffee received. Note 9 listed. Had to ration.

PL
 Dry Lake

Appendix D-4



ROUTING SLIP

FROM: John O'Malley Reg'n . Room S 237 Ext 2780 Processing				DATE: 1/11/74	
Act'n	Info	File	Addressee	Init.	Date Fwd'd
✓			Irwin Miller	.	
			SA 1	.	

COMMENTS

Are you sure you need this quantity?

How about the signatures?

You can't authorize this amount on your own.

RETURN TO:
Item 176800
5-1

86

Appendix D-4

USARDA PURCHASE REQUEST

Page **1** of **1**

Date 11/8/74	Requisitioner XYS A1 (Miller)	Purchase Request No. 6227	Amendment No.
Original ☒ Amendment ☐	Delivery Code A	Priority Code 1	

Item No.	Description	Quantity	Unit of Issue	Estimated Unit Price	Estimated Total Price
1	FSN 1860-593-9718 Panel/Solar Cell Repl.	120	DZ	360.00	43,200.

DOCUMENT IDENTIFIER (1-3) A0ARDA	ROUTING IDENTIFIER (4-6) S	M + S (7) 1	STOCK NUMBER FSN (8-20) 1860-593-9718				UNIT OF ISSUE (23-24) DZ		
QUANTITY (25-29) 120	DOCUMENT NUMBER SERV (30) XYS A1		REQUISITIONER (31-35) 4	JULIAN DATE (36-39) 14	SERIAL (40-43) 036227	DEM (44) R	END OF LINE	SUPPLEMENTARY ADDRESS (46-50) HNC	SIC (51)
FUND (52-53) XY	DISTRIB. (54-56)	PROJECT (57-59)	PRI. (60-61) AA	REQUIRED DELY DATE (62-64) 152	ADVICE (65-66)	ROUTING IDENTIFIER (67-69)	TRANSACTION (70-73)	DOLLARS (74-78) 43200	CENTS (79-80) 00

Total

43,200.Required Delivery Date: **6/1/74 or earlier**

Purchase Order Number:

Date Issued:

Priority Code: 1. Rush
2. Expedite
3. Routine

Delivery Code: A. Stock
B. Direct Delivery to Customer
C. Combination

I. Miller
Requisitioner

Approved by

87

Review Board



Appendix D-4

FROM THE DESK OF Otto B. Yonder

Mr. Roberts -

I think we ought to help them out, if possible. Can you have your people get some information together, and I'll invite him down.

O.B.Y.

Bob Herrera

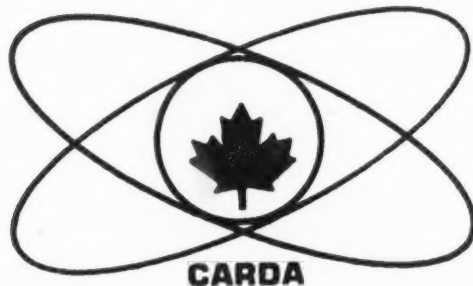
What can we do?

Roberts

Lee Mattel

Try making up a manifest with approximate quantities for the number involved. Also look on Property Disposal and see if there is anything on that list they might be able to use.

Appendix D-4



Canadian Aerospace Research
and Development Agency

Agence Canadienne de Recherche
et de Développement en Aéro-Espace

Ottawa 4, January 5, 1974

Dr. Otto B. Yonder
Executive Director
U.S. Aerospace Research and
Development Administration
Houston, Texas

My dear Dr. Yonder:

One of our scientist-astronauts had the privilege of serving with the crew for a 28-day mission on your SS-1. He reported with enthusiasm on the supplying of food, clothing, and other life support.

We are embarking on research in bio and space medicine in the coming year at our Far North regional laboratory. Five men will live in a simulated lunar environment for thirty days. They will have nearly the same conditions of life as are provided on the space stations.

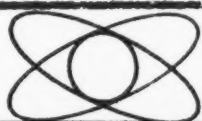
As a member of UNASEA, may we make arrangements to review with you the range of items you stock and the possibility of purchase of the items we will need for our project?

Sincerely,

James Trevor
Director General,
Scientific Programs

RL:cc

USARDA



DISPOSITION FORM

SUBJECT

Attached message DPSC (C&T)

TO

FROM

DATE

CMT

See below

Director, Supply Operations

January 8, 1974

OGR

Endorsement 1.

To: Director, Technical Operations

1. What is your reaction?

To: Director, Supply Operations *HWT*

1. We'd like to see what they're like.

Endorsement 2.

To: Director, Scientific Programs

1. Are you willing to take a chance? We can always send up a few of the old ones in case the new ones disintegrate.

To: Director, Supply Operations *W. M. R.*

1. Yes, if you provide back-up. Would not want the men to be unprotected.

Endorsement 3.

To: Chief, Commodity Branch A

1. Pls have estimate prepared of demand for next four quarters and second four quarters, using your usual formula, allowing 2 pcs. per man per mission for the four items.
2. Compute the saving that would be realized over the cost of the present demand forecast.

See Mattel - pls do. Also initiate pr. for 30 day's supply (two missions) on the 2 pc. per man basis. R. Herrera

DOCUMENT IDENTIFIER (1-3)		ROUTING IDENTIFIER (4-6)		M + S (7)		STOCK NUMBER				UNIT OF ISSUE (23-24)	
						FSN (8-20)				ADD'L (21-22)	
QUANTITY (25-29)		DOCUMENT NUMBER				DEM (44)		END OF LINE		SUPPLEMENTARY	
		SERV (30) REQUISITIONER (31-35) JULIAN DATE (36-38) SERIAL (39-43)								SERV (45) ADDRESS (46-50) SIG (51)	
FUND (52-53)	DISTRIB. (54-56)	PROJECT (57-59)	PRI. (60-61)	REQUIRED DELY DATE (62-64)	ADVICE (65-66)	ROUTING IDENTIFIER (67-69)	TRANSACTION (70-73)		DOLLARS (74-78)		CENTS (79-80)

Appendix D-4

JOINT MESSAGEFORM				SECURITY CLASSIFICATION UNCLASSIFIED			
SPACE BELOW RESERVED FOR COMMUNICATION CENTER							
4008 14:20							
PRECEDENCE		TYPE MSG (Check)		ACCOUNTING SYMBOL		ORIG. OR REFERS TO	
ACTION Reply requested		BOOK MULTI SINGLE		X		CLASSIFICATION OF REFERENCE	
FROM: DPSC (C&T)						SPECIAL INSTRUCTIONS FOR COMMUNICATIONS CENTER	
TO: USARDA SUPPLY OPERATIONS							
SUBJECT: FSN NOS. 8415-916-6394 LONG JOHN 8430-705-5927 STRETCH BOOTS 8465-820-2877 SLEEPING BAG LINER 8475-226-0417 COVERALL 1. We have received information from the Thirsty Fibre Paper Company which may produce some economies in your program. Thirsty Fibre has developed a new paper material that can be washed and reused, and suggests that we try out some of the above items in this new composition. They guarantee that with careful washing at the lowest frequency in the ultrasonic unit, the items should last through a 28-day mission, alternating one on, one off. The material has had a try-out by the Bureau of Standards. 2. If this is indeed reliable information, you may wish to make a commitment to try out the new items on a mission. Thirsty Fibre has offered to furnish a special order at the current price and according to our present specifications within 30 days, if we act promptly.							
DOCUMENT IDENTIFIER (1-3)		ROUTING IDENTIFIER (4-6)		M + S (7)		STOCK NUMBER	
						FSN (8-20)	
						ADD'L (21-22)	
						UNIT OF ISSUE (23-24)	
QUANTITY (25-29)		DOCUMENT NUMBER		DEM (44)		SUPPLEMENTARY	
		SERIAL (30-33)		END OF LINE		SIG (51)	
FUND (52-53)		DISTRIB. (54-56)		PROJECT (57-59)		PRI. (60-61)	
REQUIRED DELY DATE (62-64)		ADVICE (65-66)		ROUTING IDENTIFIER (67-69)		TRANSACTION (70-73)	
DOLLARS (74-78)		CENTS (79-80)		DOLLARS (74-78)		CENTS (79-80)	
SYMBOL S9T				SIGNATURE <i>William C. Hobler</i>			
NAME AND TITLE (Signature, if required) Beulah Jackson <i>BJ</i>				NAME AND TITLE William C. Hobler Lt.Col.USMC Director, Directorate of Clothing & Textiles			
PHONE 4138				PAGE NR. 1			
SECURITY CLASSIFICATION UNCLASS				NR. OF PAGES 1			

Appendix D-4

TO HN CONTROL CENTER FROM SS-2 4015 9:02 CST
INFORM SUPPLY OPS URGENT

1. SEND LARGE BEAKERS ULTRASONIC UNIT NEXT FLT...

TWO BROKEN IN CONTAINER.

2. SEND REPLACEMENT AIR BLOWER FOR HYDRO-JOHN NEXT FLT.

BLOWS COLD AIR ONLY...BRRR!

3. FRESH BEEF SMELLS UNFRESH. SUGGEST CHECKING OUT BEFORE
SHIPPING MORE.

OVER

Appendix D-5

IMS WORK SAMPLE ACTION FORM

On the pages of the form attached, please describe briefly what you did and why you did what you did with regard to each of the problems you worked on.

In Column 1 on the following pages, the problems are listed by number, from 1 to 20. (Note that each problem is numbered in the lower left corner. For example, Problem 1, Inventory Status Reports, is numbered 1-1 through 1-84; Problem 2, consisting of a Disposition Form and a Manifest, is numbered 2-1 through 2-4, etc.) A short description of the problem follows the number.

Column 2 is headed, "What I did." Here you are to state very briefly the action or actions you took. You might write, for example, "Reviewed item(s)" or "Furnished information" or "Asked for information (assistance) (decision)" or "Entered information on status report," etc.

Column 3 is headed, "Why." Here you are to write (also very briefly) the reasons for your action or actions (why you did what you did may not be clear from the action itself). For example, if you write in Column 2, "I viewed status reports," you might give as a reason "Looked for problem items" or "Wanted to check safety level," or if you "Asked supervisor for assistance," your reason might have been, "I didn't know procedure," or "He has to make the decision." Similarly, give your reasons for taking or not taking action on all of the problems you have worked on. In other words, in Column 3 you have an opportunity to make your reasons clear for doing what you did.

PROBLEMWHAT I DIDWHY

1-1/ Guidelines for, and
1-84 Inventory Status Reports

2-1/ Authorization for disposal of
2-4 return inventory and Manifest
for Flight 15

3-1/ Manifest for Flight 16 with
3-3 return inventory

4 Property Disposal Report

5-1/ Routing Slip and Purchase Request
5-2 returned for further review

6 Telephone message taken by
Marilyn Sweet

7-1/
7-3 Manifest for Flight 19

8-1/ Message from O. B. Yonder
8-2 with attached letter from CARDA

9-1/ Joint Messageform from DPSC with
9-2 Medical Materiel Board letter
attached

<u>PROBLEM</u>	<u>WHAT I DID</u>	<u>WHY</u>
10-1/ Supply Operations Routing Slip 10-2 with Joint Messageform from DGSC on Blanket Purchase Order		
11-1/ Disposition Form routing DPSC 11-2 Joint Messageform on Thirsty Fibre new paper product		
12 Shipping Receipt McArthur Co.		
13-1/ Routing Slip from M. Bird 13-2 with suggestion for distri- bution of returned inventory		
14 Notice of Contract Award		
15-1/ 15-3 Manifest for Flight 20		
16 Joint Messageform about clothing items from SAAMA		
17 Disposition Form - Packaging Discrepancy, Chicago Depot		
18 Telephone message from J. Goldberg, Dry Lake		

59
57

<u>PROBLEM</u>	<u>WHAT I DID</u>	<u>WHY</u>
19 Communique from SS-2		
20 Item Discrepancy Report		

PLEASE COMMENT BRIEFLY IN RESPONSE TO THE FOLLOWING QUESTIONS:

1. Did you attempt to sort the work in any way on the basis of priority?

2. If so, which problems did you consider should have priority?

3. Did you, as an experienced Inventory Manager, find it easy or fairly difficult to step into Lee Mattel's role in USARDA?

4. What more would you have done if you had had more time?

5. If you could begin now and do the work sample over again, would you approach it differently? If so, how?

6. Did you find the exercise interesting? Use the back of the page if you need more room.

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Appendix E

Lists of Courses of Action, coded and
keyed, for Selected Problems in Work
Sample

E-1 Problem 3

E-2 Problem 5

E-3 Problem 8

E-4 Problem 11

E-5 Problem 19

Appendix E-1

3. Manifest for Flight 16 with return inventory

- 2,5,7 + *A. Prepare separate or blanket authorizations for disposal of return inventory (D6A, D7J, D7Z, as in Problem 2). (If blanket authorization is made, count as 1 action; if separate documents are made, count each as 1 action)
- 2,3,5,7 +2 *B. Same as above, but score B if authorizations are in message form and have MILSTRIPS at least partially completed
- 3,6,7 O C. Post items coded A to ISRs (additions to "on hand" (17 actions--or 1 each for each posting))
- 2,5 + *D. Advise Herrera of notes from Steward on Flight 16 (shortage of fruit drink, return of corned beef hash, problem with possible beef spoilage, and/or shortage of coffee)
(If both D and E, score E only)
- 1,2,4,5,7 +2 *E. Make recommendations to Herrera on above notes (add more fruit drink, omit corned beef hash, omit beef and substitute more of another item, etc. Score here for any one or more recommendations)
- 1,2,5,7 O *F. Advise Tech Ops (or Quality Assurance) of possible beef spoilage--not asking for a reply
- 1,2,5,6,7 + *G. Ask Tech Ops (or Quality Assurance) to check on beef spoilage and advise
- 4,5 O *H. Note that 2.5 lb. pkgs. of the 5-5 lb. pkgs. of beef were also returned on Flight 15 (Problem 2)
- 1,2,5 + *I. Advise DPSC-Subsistence of beef problem
- 1,2,5 + *J. Ask Dry Lake to check on present stock of beef (before shipping more)
- 4 O *K. Note shelf life of beef--are we keeping it too long?
- 1 + L. Ask Dry Lake to check on shortage of coffee on Flight 16 (or check on quantity on future flights)
- 6 O M. Mark ISR to reflect difference in quantity issued on coffee (8955-629-3317)
- 4 + N. Note possible connection between shortage of fruit drink and discrepancy in amount of coffee sent on flight
- O. Take no action on any part of problem
- 1,2,3,4 + P. Advise Tech Ops to review specifications on corned beef hash (if reply asked for, code 6 also)
- 2,3,4 + Q. Suggest cancellation of current P.R. on corned beef hash (to Herrera, Procurement, Tech Ops)

Priority on this item is sending authorization for disposal of return inventory; checking on beef. Note * by priority actions.

Appendix E-2

5. Routing slip and Purchase Request returned for further review

- | | | | |
|-----------|----|----|---|
| 1,2,4,5,7 | +2 | A. | Prepare or plan to prepare new Purchase Request for 10 dozen |
| 1,2,5,7 | + | B. | Prepare or plan to prepare new Purchase Request for smaller quantity but not 10 dozen |
| 1,2,3,7 | + | C. | Send new Purchase Request through, routing as described in Procedures (signatures, procedures) |
| 4 | - | D. | Give reason (Action Form) for changing Purchase Request other than excess quantity |
| 4 | ○ | E. | Note on Action Form or elsewhere that excess quantity is due to confusion of unit of issue of "dozen" with "each" |
| 2 | ○ | F. | Advise Mr. Herrera of planned action or of problem in amount of order |
| 2,6 | ○ | G. | Call or write O'Malley or ask someone else to do so |
| 3,6 | ○ | H. | Note action on ISR |
| | - | I. | Take no action at all on this problem |
| 3 | + | J. | Extend new Purchase Request correctly (quantity x estimated unit price = \$3600.00 if 10 dozen ordered) |
| 2,3 | + | K. | Complete MILSTRIP on new Purchase Request |
| 2,7 | - | L. | Route old Purchase Request through for signatures without changing quantity |
| 4 | - | M. | Note Purchase Request is OK as is; leave quantity as is; verify amount |

Appendix E-3

8. Message from O. B. Yonder

- 2,4,7 +2 A. Mark blank Manifest form by entering half of quantity issued for SS-1 (10 men for 28 days). Count as 46 actions if this is done
- 2,4,7 + B. Mark blank Manifest form or plan to (1 action) with some other estimate of quantities (number of actions = number of entries) (other than random - some other logical estimate)
- 1,4 + C. Forward to Tech Ops or elsewhere for estimate of quantities
- 4 + D. Note items and amount on hand in Property Disposal report (Problem 4)
- 7 + E. Reply to Mr. Herrera or advise of action
- 1 - F. Draft letter to Canada, suggesting visit by Trevor
- 7 O G. Send information to other than Herrera (Nixon, Roberts, Yonder)
- 5 O H. Specifically mention deferment of action on this item on Action Form or elsewhere (no time now, not priority, etc.)

Appendix E-4

11. Disposition Form routing DPSC Joint Messageform on Thirsty Fibre new paper product

- 2,3,4,7 +2 A. Estimate demand for 1st 4 Quarters and 2nd 4 Quarters, allowing 2 pcs. per man per mission for each item
- No. men x no. missions x 2 = 25 x 13 x 2 = 650 1st 4 Q.
No. men x no. missions x 2 = 50 x 13 x 2 = 1,300 2nd 4 Q. (Count as 8 actions)
- 2,3,4,7 +2 B. Estimate savings within \$1,000.
- Estimate using present forecast:
- | | | |
|-----------------------|-------------------------|---------------------------------|
| 2 yr. Long Johns | 2,418 dz. @ \$36. dz. = | 87,048. |
| " Stretch Boots | 1,284 dz. @ \$36. dz. = | 46,224. |
| " Sleeping Bag Liners | 1,209 dz. @ \$24. dz. = | 29,016. |
| " Coveralls | 1,284 dz. @ \$48. dz. = | 61,632. |
| | Total | \$223,920. (Count as 8 actions) |
- Estimate using 2 pcs. ea. 2 yrs. (see A.)
- 1st yr. 650 + 2nd yr. 1,300 = 1,950 or 162.5 dz.
- | | | |
|---------------------|-------------------------|------------------------------|
| Long Johns | 162.5 dz. @ \$36. dz. = | 5,850. |
| Stretch Boots | 162.5 dz. @ \$36. dz. = | 5,850. |
| Sleeping Bag Liners | 162.5 dz. @ \$24. dz. = | 3,900. |
| Coveralls | 162.5 dz. @ \$48. dz. = | 7,800. |
| | Total | 23,400. (Count as 8 actions) |
| | Savings | \$200,520. |
- 2,3,4,7 + C. Estimate savings, but more than \$1,000. off (count as 8 actions if work done)
- 3,4 + D. Note that estimated savings will not be realistic without knowing price per unit of items in new materiel
- 3,4 + E. Note that FSN numbers should be obtained for items in new materiel before initiating Purchase Request
- 1,2,4,7 +2 F. Initiate Purchase Request for 30 days' supply (2 missions, one each for SS-1 and SS-2) on basis of 2 pcs. per man (25 men x 2 pcs. ea. = 50 pcs. or rounded by dz. in pkg. 5 dz. of each item) either leaving FSN blank or using numbers of present items and present prices (count separate actions - 8 if all)
- 4 O G. Send Purchase Request through with correspondence attached
- 1 O H. Ask Mr. Herrera for information, advice, or decision
- 1 O I. Some evidence of work on this problem (listing demand forecast, or some computations without resolution)
- J. Take no action at all on this problem
- 6 O K. Attach detail to or note on ISRs (one action for each)

Appendix E-5

19. Communique from SS-2

- | | |
|---------|--|
| 1,2,5 | ○ A. Identify item(s) with FSNs (one action each) |
| 1,2,3,5 | + B. Expedite "due in" beakers by Disposition Form or other message |
| 2,5,7 | +2 C. Add beakers and/or air blower to Flight 20 (Problem 15) |
| 1,2,5,7 | - D. Send or plan to send directive to Houston to transfer beakers to Dry Lake for Flight 20 (unnecessary because 1 unit is on hand at Dry Lake) |
| 1,2,5,7 | + E. Send or plan to send directive to Houston depot to transfer air blower to Dry Lake |
| 4 | + F. Relate message on beef to Problem 3 (Flight 16) |
| 1,2,7 | + G. Refer beef situation to Tech Ops or Quality Assurance (do not score here again if this action was taken on Problem 3) |
| 1,2,4 | + H. Advise DPSC-Subsistence of beef situation (do not score here again if this action was taken on Problem 3) |
| 2,6 | ○ I. Reply to SS-2 communique via Houston Control Center |
| 3,6 | ○ J. Note on ISRs (1 action for each) |
| 1,2,3 | - K. Initiate Purchase Requests for air blower and/or beakers (not necessary --on hand) |
| 1,2,5 | - L. Put beakers on wrong flight (SS-1) |
| 1,3 | ○ M. Ask return of broken beakers for disposal |
| 3,4 | ○ N. Question shelf-life or suggest other reason for possible spoilage of beef |
| 1,2,4,5 | + O. Message Dry Lake to check on beef stock there (do not score here if scored on Problem 3) |
| 6 | + P. Plan to follow up beef situation (ask for report on investigation (code 1), make note to check later, etc.) |
| 2,5 | ○ Q. Note or set deadline for getting items to Dry Lake for flight |
| 6 | ○ R. Advise Mr. Herrera of actions taken |
| | - S. Take no action at all on this problem |
| 2,4,7 | + T. Delete beef from Flight 20 (Item 15). (Do not score here if already scored on 15). |
| 1,2,3,6 | ○ U. Advise return of air blower for investigation |
| 3,4 | ○ V. Question packing of beakers as reason for breakage |

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Appendix F

F-1 Scoring Forms for Work Sample

Appendix F-1

	<u>Scorer 1</u> <u>Raw Scores</u>	<u>Scorer 2</u> <u>Raw Scores</u>	<u>Total</u>	<u>Average</u>
1. Takes Leading Action to Solve Problems				
2. Uses New Procedures				
3. Shows IM Knowledge				
4. Analyzes Problems and Relates Information				
5. Organizes systematically				
6. Maintains Controls				
7. Follows Directions				
8. Productivity C/A ____ I/A ____ U/A ____				
9. Quality of Actions + ____ - ____				
10. Scorer's Rating of Overall Performance Low 1 2 3 4 5 6 7 High (Use + or - for shades of difference)				

Subject's ID No. _____

Scorer _____

Date _____

[illegible]

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Appendix G

G-1 Job Performance Appraisal Form for
Inventory Management Specialists

G-2 Importance Rating Scale Form

Name of Rater _____

Installation _____

PR-71-23

Appendix G-1

JOB PERFORMANCE APPRAISAL FORM

FOR

INVENTORY MANAGEMENT SPECIALISTS

Prepared by

Educational Testing Service

(Experimental edition - for research purposes only)

PURPOSE OF THE RATINGS AND HOW TO USE THE RATING SCALES

Purpose: As you know, we are giving a number of tests to inventory management specialists as part of a research project. These tests measure certain aptitudes and abilities, but not how well each person does his job. We want to find out whether these aptitudes and abilities are related to job performance. In order to do this, we need your help in rating the inventory managers in your section on each of nine characteristics considered to be important aspects of job performance and then on their overall job performance. You are also being asked to rate the performance of a fictitious person named Mel Stripp, based on descriptions of him and his work. We will use this rating as a reference point for comparing the ratings of many people in the locations included in this study.

The ratings you make will be used for research purposes only, and will not affect the job of any person. They will not be seen by anyone except members of the Educational Testing Service research staff. When you finish the ratings, insert the booklet in the envelope provided and seal it. It will not be opened until it reaches ETS in Princeton, New Jersey.

Description of the Rating Scales: Each of the ten scales is on a separate page and is described in a paragraph in which examples of effective and ineffective behavior are given. For Scales 1 through 9, further illustrations are given in paired statements at the high, middle, and low ends of the scale. The statements on the left side of the scale are general descriptions of performance, while those on the right side of the scale serve as examples of behavior. For Scale 10, the five unpaired statements illustrate five different levels of performance. For each scale, a description of Mel Stripp and his work appears in a box on the left-hand page facing the scale.

General Directions for Rating: Please look at the last page. The names of the persons you are being asked to rate are listed at the bottom of the page with their assigned numbers, and can be seen as you proceed from scale to scale. Mel Stripp has been assigned number 1. Please fill in the length of time you have supervised each other person listed in the space provided before proceeding with the ratings. If you do not know the work of some of the people well, please do not rate them. The persons you rate probably will not fit the illustrations exactly. These illustrations are only typical examples of behavior at the high, middle, and low points on the scale. You will have to make a judgment as to where each person best fits on the scale, and that may be somewhere between the levels illustrated. Try to avoid the tendency to rate everyone high or low, or to rate a person at the same point on every scale. Think about the aspects of the job which he does well and those he does less well.

How to Record Your Ratings: Make your ratings of all persons on one scale at a time. Turn to Scale 1. Read the description of the scale at the top of the page and the illustrations at the three scale points. Read the description of Mel Stripp and his work on the left-hand page and note that we have entered a rating based on this description, as an example. Considering each person in turn, draw a horizontal line which crosses the scale at that point which in your best judgment represents his usual level of performance. Write the person's assigned number opposite this line as we have done for Mel Stripp. If in your judgment more than one individual should be rated at the same point, write his number opposite that line also. Draw horizontal lines across the scale for all the other persons. Try to consider differences among the individuals you rate on the aspect of performance being rated.

Now proceed through the other nine scales in the same manner, except that you are to rate Mel Stripp also on these other scales on the basis of the descriptions of him and his work given in the boxes opposite each scale. After completing all the ratings, you may wish to go back through the scales to recheck your ratings and make any adjustments you feel might express your judgment more accurately.

If you have any questions, please ask the research person who is working on this program. If such a person is not available, make the ratings as best as you can. Please write any questions or comments on the back of the booklet so they may be taken into account in using your ratings.

REMEMBER, THIS INFORMATION WILL BE KEPT CONFIDENTIAL AND WILL BE USED FOR RESEARCH PURPOSES ONLY.
MAKE YOUR RATINGS AS FRANKLY AND HONESTLY AS YOU CAN.

Thank you for your cooperation.

Most of the time Mel Stripp's work flow runs smoothly, and his ability to foresee future demands is pretty good. He usually adjusts his plans and priorities as conditions change, so that he has relatively few emergency procurements, cancellations, and accelerations. However, he has been known to fail to generate a requisition when he should, so that his stock becomes depleted and he has to ask a buyer to institute "fire-drill" procedures to get it for him.

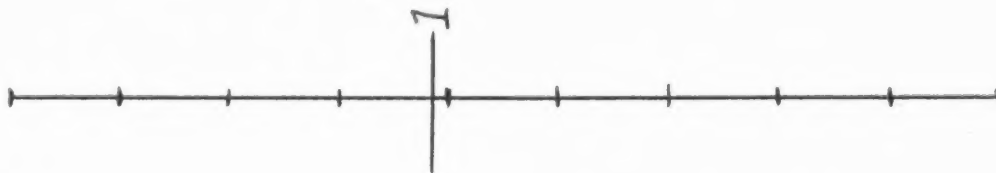
Scale 1

Some managers plan their work effectively, and seem to "think ahead" about what needs to be done. They can coordinate a great variety of management actions, such as procurement, repair and redistribution in solving materiel support problems. Other managers seem to need help in getting organized and in structuring their work efficiently. In this rating, appraise each person only on the basis of how well he organizes and plans his work; disregard other aspects of the work.

Plans out his work and appropriately assigns priorities. Anticipates and plans for unusual situations.

Plans for most of the work, but is limited in ability to anticipate and provide for less obvious needs and emergencies.

Cannot judge priorities well. Needs assistance in planning work schedule.



This person will have planned ahead when others have not, and he organizes his work efficiently. He never runs out of time in completing the work on his items, often finishing before it is due.

This person plans out his assigned work load. He considers everything he has to do on his items, and usually makes sure he can complete the necessary work on time.

This person usually wastes time doing some unnecessary job and must have constant supervision to get anything done. He usually does not finish his work on time, and does not anticipate irregularities.

Mel Stripp enjoys being an inventory manager. He has samples of his items and he has found out just how they work and what sorts of things they are used for. He collects newspaper and magazine articles about "his" items. He has even taken a course offered at a local college on inventory management. He likes to try to think up better or easier ways to do tasks, and often makes suggestions to others.

Scale 2

Some people take much interest and pride in their work. They try to improve the quality of their work by study and practice. Others, regardless of their ability to do the work, do not seem to take an interest in it except as a way to earn a living. They carry out their assignments in a routine way, without enthusiasm or involvement. When making this rating, consider the person's interest demonstrated on the job, rather than the actual quality of his work.

Enjoys his work. Voluntarily takes steps to accomplish tasks without being asked. Shows some ingenuity. Shares knowledge and skill with others.

Generally shows interest in his work. Occasionally requires prodding from his supervisor. Does what is expected of him for the position he holds.

Rarely shows any interest in his work. Gives the impression that he would rather be somewhere else.



This person makes suggestions for expediting the acquisition and delivery of the items he manages. He shows concern for the outcome of the job. He takes advantage of all opportunities to improve his knowledge and skill.

This person usually shows some enthusiasm about his job. He sometimes does extra work concerning some of his items, and his customers seldom complain.

This person usually does the minimum amount of work necessary for his job, and no more. He sometimes neglects his duties and shows little interest in his work, often acting bored.

Because of his interest in inventory and supply, Mel Stripp is the first to want to use new procedures. After instruction in a new procedure, Mel usually rushes off to try it out. He may go ahead with the procedure before he really understands it, however, and do the work incorrectly. Meanwhile, his phone rings constantly and he is in a jam trying to straighten out puzzled buyers or customers. He can learn facts well but has trouble understanding how to apply them.

Scale 3

Some people can absorb and interpret new procedures and policy guides quickly with a minimum of instruction or explanation. They are able to read and understand specifications for a complex procedure when faced with it for the first time. Others seem unable to learn even after repeated explanations and practice. They have difficulty learning new methods and in remembering changes in procedures. When making this rating, disregard experience and technical knowledge and appraise the person's ability to learn on the job.

Learns new methods and techniques easily, and seems quick to understand and comply with new procedures.

After some instruction, can use new procedures well and with understanding.

Seems slow to understand. Must constantly be shown how to do procedures or tasks that should be familiar by now.



This person is the first to learn a new procedure, and he needs a minimum of instruction. He might be the one selected to learn a new method and explain it to others.

This person requires some help and practice in order to master new procedures.

This person has difficulty learning new things. He needs a lot of help and practice if he is to perform a new task.

Mel enjoys talking to people but sometimes has difficulty expressing what he wants to say in general conversation. He finds writing letters and memos difficult, and avoids this chore as often as possible. He knows the technical vocabulary, though, and speaks and writes well enough so that he can communicate supply and inventory information adequately to others.

Scale 4

Inventory managers have to communicate with each other, with many other people at their installation, and with others in the supply system. Oral and written communications at many levels are necessary in order to get the work done. Some people can communicate clearly and effectively, while others seem to have difficulty expressing themselves well in person or in writing. Rate the individual's ability to communicate effectively with others; disregard all other aspects of the job.

Expresses self clearly and accurately in person and in writing. Is understood well and knows the supply "jargon."

This person speaks well and his written communications are well-expressed and clear. He has a large technical vocabulary and uses it easily.

Has an adequate command of the inventory management language, both oral and written.

This person usually expresses himself adequately, although occasionally he has trouble getting his ideas across to others. His letters and memos sometimes are not clear.

Has some difficulty expressing himself orally and in writing in a way that others can easily understand.

This person often gropes for words and has difficulty communicating with others in the installation or with customers. His written communications often have to be edited.

Mel Stripp has an infinite capacity for facts of all kinds, which he is generous in sharing with others. He always keeps his procedures manual up to date, and has assembled a library of specifications which he consults frequently. His understanding of the facts is not as good as his collection of them. As it is, he tends to speak authoritatively, but when he recommends substitutions or replacements, his superiors do not always accept his suggestions.

Scale 5

Inventory managers must have a great deal of technical know-how in order to do their jobs. Some are thoroughly familiar with the many specific procedures and methods required for the job, and may have the responsibility for training and guiding new managers. They keep abreast of current changes, and can interpret and apply information. Others do not seem to understand even what should be "common knowledge" about their job or why certain things are done. When making this rating, appraise the person's technical knowledge and disregard other aspects of his work.

Has unusual comprehension of the technical procedures involved in inventory management work, and a good understanding of the basic principles of supply operations.

This person has a great deal of technical knowledge, and others in his area come to him with their questions. He has thorough understanding of a wide variety of policies and procedures, and can apply the information correctly.

Possesses essential technical information, but may not understand why things are done.

This person has an adequate familiarity with most phases of his job, and seems well informed about many procedures, but lacks an overall understanding of the basic supply concepts.

Very spotty technical knowledge, restricted to only the most common information. Many gaps in his knowledge.

This person performs his job purely by rote. He asks questions about things that should be common knowledge, and seldom seems to know where to go to get missing information.

Mel Stripp can usually change from one task to another easily, especially if he is very familiar with the procedures required for the various tasks. As long as the day's work goes along in its usual routine, Mel has no trouble. If unexpected problems or new procedures come up, or if something extra needs to be done in a hurry, though, he seems to "fall apart." When the pressure is on, he makes mistakes in little details that lead to costly errors because he can't think clearly enough to be rational.

Scale 6

Some people can work effectively in different situations and can adapt to a variety of conditions. They can handle a wide diversity of assignments, and can operate efficiently in a crisis. Others seem to "go to pieces" when extra demands are made on them or when they are asked to change their routine. When making this rating, appraise the person's ability to adapt to changing situations encountered while at work and his stability under pressure; disregard all other aspects of his work.

Can adapt readily to new procedures and situations. Capable of changing tasks suddenly and with efficiency. Can handle a crisis smoothly.

Able to change from one task to another and handle a reasonable number of tasks at the same time. Might show strain in a crisis, but usually responds well to changing procedures and needs.

Rather slow and reluctant to accept or adapt to changes or to unusual work situations.



This person can handle a wide variety of tasks. He readily accepts changes in tasks or procedures, and remains calm even under unusual time and work pressures.

This person works best when procedures and work load are routine, but can adapt to changes or crises as required.

This person grumbles about any departure from routine. He is likely to resist changes, and his work suffers in a crisis.

Mel Stripp will work long and hard on what he considers a challenging assignment. He will spend considerable time checking on delivery schedules and getting expediting action, and thinking of places to search for stock if it is not available. However, he soon loses interest if given a less interesting job, and may spend time visiting with other to get out of working on it. Mel's supervisor can never be sure that his output will be at a high level consistently, and if there is concern about getting a job done on time, he usually gives it to somebody else.

Some people can always be counted on to do their job, and to do it well. They are willing to keep at a task until it is completed even if it is difficult, or perhaps not very interesting. They can be depended upon to do their work conscientiously, accurately, and with a minimum of guidance. Others tend to give up easily, or find an excuse not to finish. Their supervisor can never be sure if their work will be completed on time, or if a thorough job will be done. When making this rating, appraise the person's dependability and his perseverance in completing his assignments.

Can be relied upon to carry out the required tasks, and to persist until they are completed, doing an accurate job.

Usually completes his work, but may try to avoid certain tedious tasks. Figures out problems as far as he can, then asks questions.

Often finds it difficult to follow suggestions or directions. Has little patience, and gives up easily.



This person always does his assigned work. He is thorough, and works patiently at whatever he has to do.

This person generally follows instructions. He works uncomplainingly on most of his tasks, but may try to get out of some of the more difficult ones.

This person often overlooks part of his job, and cannot be counted on to finish his work on time.

Mel usually uses good judgment in doing his work. If the situations are not too complex, his "common sense" is evident. However, when the facts are unclear, or where there are discrepancies in the records, he may misinterpret information without realizing it. Perhaps he trusts the computer too much—several times he has made costly errors because he did not challenge the output data.

Scale 8

Some people use good practical judgment in carrying out their work. They can analyze the situations or facts and reach logical conclusions in the face of conflicting considerations and alternatives. They seem to use sound "common sense" to reach the best solutions to problems. Others are not as skilled at analyzing the situation, and have trouble deciding what is best to do when there is not a definite solution. When making this rating, appraise each individual on his ability to make sound judgments regarding his work.

Shows good judgment, even in difficult or complicated situations. Able to pick the most appropriate alternative.

Usually is able to reach the best decision, but sometimes has difficulty. May misinterpret information.

Seldom shows good judgment. Decisions usually contestable.



This person can be counted on to use sound judgment in his work. He can reach proper conclusions as to what is best to do for the task involved.

This person can make valid judgments if the facts or situations are not very complicated. He has difficulty, though, if a situation is too complex.

This person almost always has to ask someone else what should be done. He seems unable to decide properly for himself, and doesn't appear to have any "common sense."

Mel's co-workers think he's a good guy. When they are stuck with a problem, they know he will help--he is never too busy to lend a hand. His cheerful telephone manner has won him friends at supply depots who have never met him face-to-face. He is especially helpful to servicemen who have trouble expressing themselves in technical terms. He also has good relationships with technical operations and procurement people, who find him easy to get along with.

Scale 9

Some people can initiate and maintain effective personal contacts with representatives of other organizations, subject-matter specialists, contractors, and others. They are respected and well-liked by their co-workers, and they establish good relationships with all those involved in getting the job done. Others have difficulty getting along with people, and are not very popular with their associates. They will not go out of their way to be accommodating or to share responsibility. When making this rating, appraise each individual only on his ability to work well with others.

Always gets and gives good cooperation. Coordinates his work well with that of his co-workers and others with whom he deals.



This person is always willing to cooperate with others. He is helpful and agreeable.

Usually cooperates with others, but sometimes is difficult to get along with.

This person is often cooperative with his co-workers and others but may occasionally irritate them.

Frequently uncooperative and unpleasant.

This person is hardly ever cooperative. He cannot seem to work well with others when necessary.

Using the descriptions of Mel Stripp and his work given for the previous scales, please give him an overall rating. This may not be a true evaluation of him as an inventory manager, because you have never actually seen any of his work or have never met him in person. From your impression of him, rate him on this scale along with the other people in your group.

Scale 10

You have been asked to make ratings on some specific qualities that contribute to a person's performance on the job. Other qualities not included in these scales might be important in your judgment of a person's overall effectiveness as an inventory manager. On this last scale, we are asking you to think of the total job a person is doing and how effective he is as a member of your work group. When making this rating, try to spread the ratings on the scale as much as you realistically can.

This is the most valuable person in our work area. He is an outstanding worker. This person would be missed most if he were to leave.

This person is about average as a worker. We can certainly use people like him, but if he were to leave he could probably be replaced without much trouble.

This person barely meets the minimum requirements of the job. His work is usually of unacceptable quality, and if he were to leave he would not be missed.



This is a very valuable person. His overall performance is above average, and we would be sorry to lose him.

This person's work is somewhat below average. It is seldom safe to depend on him for other than routine tasks. His work has to be constantly checked.

FINAL INSTRUCTIONS

1. Check all the scales to make sure that each horizontal line you have drawn has a number beside it.
2. Place this booklet in the envelope that has been provided.
3. Seal the envelope and write your name on the front of it.

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Assigned Number	NAME OF PERSON TO BE RATED	How long have you supervised this person?	Assigned Number	NAME OF PERSON TO BE RATED	How long have you supervised this person?
1	Mel Stripp		6		
2			7		
3			8		
4			9		
5			10		

Appendix G-2

Importance Rating Scales

You have provided ratings of the job performance of inventory managers on nine different scales plus an "overall" scale. The qualities or aspects of job performance described in the first nine scales probably vary in importance.

On the other side of this page, please indicate how important each of these qualities is to overall job performance as an inventory manager, by drawing a vertical line which crosses the rating scale at the appropriate point.

Name: _____

Installation: _____

	Not Important. Irrelevant to Proper Job Performance	Important. Contributes to Proper Job Performance	Very Important. Essential to Proper Job Performance
Scale 1 "...plan their work efficiently..."	_____	_____	_____
Scale 2 "...take much interest and pride in their work..."	_____	_____	_____
Scale 3 "...can absorb and inter- pret new procedures and policy guides..."	_____	_____	_____
Scale 4 "...communicate clearly and effectively..."	_____	_____	_____
Scale 5 "...have a great deal of technical know-how..."	_____	_____	_____
Scale 6 "...adapt to changing situations and pressures..."	_____	_____	_____
Scale 7 "...can be counted on to do their job..."	_____	_____	_____
Scale 8 "...use good practical judgment..."	_____	_____	_____
Scale 9 "...work well with others..."	_____	_____	_____